



1

SEQUENCE LISTING

<110> MANNING, GERARD  
SUDARSANAM, SUCHA

<120> METHOD FOR SELECTIVELY INHIBITING FUNGAL GROWTH

<130> 034536/0323

<140> 10/618,581

<141> 2003-07-15

<150> 60/395,624

<151> 2002-07-15

<160> 42

<170> PatentIn Ver. 2.1

<210> 1

<211> 1064

<212> PRT

<213> *Saccharomyces cerevisiae*

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Ser	Thr	Met	Ala	Pro	Ala	Thr	Leu	Arg	Met	Met	Gly	Lys	Ser	Pro	Gln	
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Gln	Gln	Gln	Gln	Gln	Asn	Thr	Pro	Leu	Met	Pro	Pro	Ala	Asp	Ile	Lys	
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Tyr	Ala	Asn	Asn	Gly	Asn	Ser	His	Gln	Ala	Glu	Gln	Lys	Glu	Arg	Gln	
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Val	Glu	Leu	Glu	Gly	Lys	Ser	Arg	Glu	Asn	Ala	Pro	Lys	Pro	Asn	Thr	
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Thr	Ser	Gln	Ser	Arg	Val	Ser	Ser	Ser	Gln	Gly	Met	Pro	Lys	Gln	Phe	
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Arg	Gln	Lys	Lys	Leu	Glu	Lys	Glu	Ile	Ser	Arg	Asp	Lys	Arg	Thr	Ile
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Leu	Phe	Glu	Met	Cys	Thr	Leu	Ser	Asn	His	Phe	Tyr	Met	Leu	Phe	Glu
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Tyr	Val	Ser	Gly	Gly	Gln	Leu	Leu	Asp	Tyr	Ile	Ile	Gln	His	Gly	Ser
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Ile	Arg	Glu	His	Gln	Ala	Arg	Lys	Phe	Ala	Arg	Gly	Ile	Ala	Ser	Ala
				245					250					255	
Leu	Ile	Tyr	Leu	His	Ala	Asn	Asn	Ile	Val	His	Arg	Asp	Leu	Lys	Ile
			260					265					270		
Glu	Asn	Ile	Met	Ile	Ser	Asp	Ser	Ser	Glu	Ile	Lys	Ile	Ile	Asp	Phe
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Thr	Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Phe	Gly	Val	Val	Leu	Phe	Val
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Leu	Val	Cys	Gly	Lys	Val	Pro	Phe	Asp	Asp	Glu	Asn	Ser	Ser	Val	Leu
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His	Glu	Lys	Ile	Lys	Gln	Gly	Lys	Val	Glu	Tyr	Pro	Gln	His	Leu	Ser
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Ile	Glu	Val	Ile	Ser	Leu	Leu	Ser	Lys	Met	Leu	Val	Val	Asp	Pro	Lys
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Arg	Arg	Ala	Thr	Leu	Lys	Gln	Val	Val	Glu	His	His	Trp	Met	Val	Arg
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Gly	Phe	Asn	Gly	Pro	Pro	Pro	Ser	Tyr	Leu	Pro	Lys	Arg	Val	Pro	Leu
				405					410					415	
Thr	Ile	Glu	Met	Leu	Asp	Ile	Asn	Val	Leu	Lys	Glu	Met	Tyr	Arg	Leu
			420					425					430		
Glu	Phe	Ile	Asp	Asp	Val	Glu	Glu	Thr	Arg	Ser	Val	Leu	Val	Ser	Ile
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Ile	Thr	Asp	Pro	Thr	Tyr	Val	Leu	Leu	Ser	Arg	Gln	Tyr	Trp	Thr	Leu
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Ala	Ala	Lys	Met	Asn	Ala	Glu	Ser	Ser	Asp	Asn	Gly	Asn	Ala	Pro	Asn
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Ile Thr Glu Ser Phe Glu Asp Pro Thr Arg Ala Tyr His Pro Met Ile  
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 Ser Ile Tyr Tyr Leu Thr Ser Glu Met Leu Asp Arg Lys His Ala Lys  
 500 505 510  
 Ile Arg Asn Gln Gln Gln Arg Gln Ser His Glu Asn Ile Glu Lys Leu  
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 Ser Glu Ile Pro Glu Ser Val Lys Gln Arg Asp Val Glu Val Asn Thr  
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 Thr Ala Met Lys Ser Glu Pro Glu Ala Thr Leu Ala Thr Lys Asp Thr  
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 His Val Leu Ile Pro Pro Arg Leu Ala Met Pro Glu Gln Ala His Thr  
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 Ser Pro Thr Ser Arg Lys Ser Ser Asp Asn Gln Arg Arg Glu Met Glu  
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 Tyr Ala Leu Ser Pro Thr Pro Gln Gly Asn Asp Tyr Gln Gln Phe Arg  
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 Val Pro Ser Thr Thr Gly Asp Pro Ser Glu Lys Ala Lys Phe Gly Asn  
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 Ile Phe Arg Lys Leu Ser Gln Arg Arg Lys Lys Thr Ile Glu Gln Thr  
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 Gly Gly Asn Lys Gly Asp Phe Pro Ala Leu Pro Ala Asp Ala Glu Asn  
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 Leu His Asp Ile Asn Lys Gln Asn Asn Glu Val Ala Lys Gly Ser Gly  
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 Asn His Pro Leu Pro Pro Leu Asn Val Ala Lys Gly Arg Lys Leu His  
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Pro Ser Ala Arg Ala Lys Ser Val Gly His Ala Arg Arg Glu Ser Leu  
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 Lys Tyr Met Arg Pro Pro Met Pro Ser Ser Ala Tyr Pro Gln Gln Glu  
 805 810 815  
 Leu Ile Asp Thr Gly Phe Leu Glu Ser Ser Asp Asp Asn Lys Ser Asp  
 820 825 830  
 Ser Leu Gly Asn Val Thr Ser Gln Thr Asn Asp Ser Val Ser Val His  
 835 840 845  
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 865 870 875 880  
 Pro Ser Ile Asp Phe Pro Arg Ser Leu Phe Leu Lys Gly Phe Phe Ser  
 885 890 895  
 Val Gln Thr Thr Ser Ser Lys Pro Leu Pro Ile Val Arg Tyr Lys Ile  
 900 905 910  
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 Gly Phe Val Cys Met Gln Arg Phe Ser Ser Asn Asn Val Ala Ala Lys  
 930 935 940  
 Arg Glu Gly Thr Pro Arg Ser Ile Met Pro Leu Ser His His Glu Ser  
 945 950 955 960  
 Ile Arg Arg Gln Gly Ser Asn Lys Tyr Ser Pro Ser Ser Pro Leu Thr  
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 Thr Asn Ser Ile His Gln Arg Lys Thr Ser Ile Thr Glu Thr Tyr Gly  
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 Asp Gly Ser Glu Gly Met Thr Thr Thr Glu Lys Glu Pro Ile Lys Phe  
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&lt;210&gt; 2

&lt;211&gt; 1147

&lt;212&gt; PRT

<213> *Saccharomyces cerevisiae*

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			20					25					30		
Thr	Arg	Val	Ala	Ala	Pro	Ala	Thr	Leu	Arg	Met	Met	Gly	Lys	Gln	Ser
	35						40					45			
Gly	Pro	Arg	Asn	Asp	Gln	Gln	Gln	Ala	Pro	Leu	Met	Pro	Pro	Ala	Asp
	50					55					60				
Ile	Lys	Gln	Gly	Lys	Glu	Gln	Ala	Ala	Gln	Arg	Gln	Asn	Asp	Ala	Ser
	65				70					75					80
Arg	Pro	Asn	Gly	Ala	Val	Glu	Leu	Arg	Gln	Phe	His	Arg	Arg	Ser	Leu
			85						90					95	
Gly	Asp	Trp	Glu	Phe	Leu	Glu	Thr	Val	Gly	Ala	Gly	Ser	Met	Gly	Lys
			100					105					110		
Val	Lys	Leu	Val	Lys	His	Arg	Gln	Thr	Lys	Glu	Ile	Cys	Val	Ile	Lys
			115				120					125			
Ile	Val	Asn	Arg	Ala	Ser	Lys	Ala	Tyr	Leu	His	Lys	Gln	His	Ser	Leu
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Pro	Ser	Pro	Lys	Asn	Glu	Ser	Glu	Ile	Leu	Glu	Arg	Gln	Lys	Arg	Leu
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Glu	Lys	Glu	Ile	Ala	Arg	Asp	Lys	Arg	Thr	Val	Arg	Glu	Ala	Ser	Leu
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Gly	Gln	Ile	Leu	Tyr	His	Pro	His	Ile	Cys	Arg	Leu	Phe	Glu	Met	Cys
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Thr	Met	Ser	Asn	His	Phe	Tyr	Met	Leu	Phe	Glu	Tyr	Val	Ser	Gly	Gly
		195					200					205			
Gln	Leu	Leu	Asp	Tyr	Ile	Ile	Gln	His	Gly	Ser	Leu	Lys	Glu	His	His
	210					215					220				
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	225				230				235						240
Ala	Asn	Asn	Ile	Val	His	Arg	Asp	Leu	Lys	Ile	Glu	Asn	Ile	Met	Ile
				245					250					255	
Ser	Ser	Ser	Gly	Glu	Ile	Lys	Ile	Ile	Asp	Phe	Gly	Leu	Ser	Asn	Ile
			260					265					270		

Phe	Asp	Tyr	Arg	Lys	Gln	Leu	His	Thr	Phe	Cys	Gly	Ser	Leu	Tyr	Phe	275	280	285
Ala	Ala	Pro	Glu	Leu	Leu	Lys	Ala	Gln	Pro	Tyr	Thr	Gly	Pro	Glu	Val	290	295	300
Asp	Ile	Trp	Ser	Phe	Gly	Ile	Val	Leu	Tyr	Val	Leu	Val	Cys	Gly	Lys	305	310	315
Val	Pro	Phe	Asp	Asp	Glu	Asn	Ser	Ser	Ile	Leu	His	Glu	Lys	Ile	Lys	325	330	335
Lys	Gly	Lys	Val	Asp	Tyr	Pro	Ser	His	Leu	Ser	Ile	Glu	Val	Ile	Ser	340	345	350
Leu	Leu	Thr	Arg	Met	Ile	Val	Val	Asp	Pro	Leu	Arg	Arg	Ala	Thr	Leu	355	360	365
Lys	Asn	Val	Val	Glu	His	Pro	Trp	Met	Asn	Arg	Gly	Tyr	Asp	Phe	Lys	370	375	380
Ala	Pro	Ser	Tyr	Val	Pro	Asn	Arg	Val	Pro	Leu	Thr	Pro	Glu	Met	Ile	385	390	395
Asp	Ser	Gln	Val	Leu	Lys	Glu	Met	Tyr	Arg	Leu	Glu	Phe	Ile	Asp	Asp	405	410	415
Ile	Glu	Asp	Thr	Arg	Arg	Ser	Leu	Ile	Arg	Leu	Val	Thr	Glu	Lys	Glu	420	425	430
Tyr	Ile	Gln	Leu	Ser	Gln	Glu	Tyr	Trp	Asp	Lys	Leu	Ser	Asn	Ala	Lys	435	440	445
Gly	Leu	Ser	Ser	Ser	Leu	Asn	Asn	Asn	Tyr	Leu	Asn	Ser	Thr	Ala	Gln	450	455	460
Gln	Thr	Leu	Ile	Gln	Asn	His	Ile	Thr	Ser	Asn	Pro	Ser	Gln	Ser	Gly	465	470	475
Tyr	Asn	Glu	Pro	Asp	Ser	Asn	Phe	Glu	Asp	Pro	Thr	Leu	Ala	Tyr	His	485	490	495
Pro	Leu	Leu	Ser	Ile	Tyr	His	Leu	Val	Ser	Glu	Met	Val	Ala	Arg	Lys	500	505	510
Leu	Ala	Lys	Leu	Gln	Arg	Arg	Gln	Ala	Leu	Ala	Leu	Gln	Ala	Gln	Ala	515	520	525
Gln	Gln	Arg	Gln	Gln	Gln	Gln	Gln	Val	Ala	Leu	Gly	Thr	Lys	Val	Ala	530	535	540
Leu	Asn	Asn	Asn	Ser	Pro	Asp	Ile	Met	Thr	Lys	Met	Arg	Ser	Pro	Gln	545	550	555
Lys	Glu	Val	Val	Pro	Asn	Pro	Gly	Ile	Phe	Gln	Val	Pro	Ala	Ile	Gly	565	570	575



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Asn Arg Leu Thr Ser Val Tyr Ser Gln Glu Leu Thr Glu Lys Gln Ile
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Leu Glu Glu Ala Ser Lys Ala Pro Pro Gly Ser Met Pro Ser Ile Asp
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Tyr Pro Lys Ser Met Phe Leu Lys Gly Phe Phe Ser Val Gln Thr Thr
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Ser Ser Lys Pro Leu Pro Ile Val Arg His Asn Ile Ile Ser Val Leu
      930                      935                      940

Thr Arg Met Asn Ile Asp Phe Lys Glu Val Lys Gly Gly Phe Ile Cys
      945                      950                      955                      960

Val Gln Gln Arg Pro Ser Ile Glu Thr Ala Ala Val Pro Val Ile Thr
      965                      970                      975

Thr Thr Gly Val Gly Leu Asp Ser Gly Lys Ala Met Asp Leu Gln Asn
      980                      985                      990

Ser Leu Asp Ser Gln Leu Ser Ser Ser Tyr His Ser Thr Ala Ser Ser
      995                      1000                      1005

Ala Ser Arg Asn Ser Ser Ile Lys Arg Gln Gly Ser Tyr Lys Arg Gly
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Gln Asn Asn Ile Pro Leu Thr Pro Leu Ala Thr Asn Thr His Gln Arg
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Asn Ser Ser Ile Pro Met Ser Pro Asn Tyr Gly Asn Gln Ser Asn Gly
      1045                      1050                      1055

Thr Ser Gly Glu Leu Ser Ser Met Ser Leu Asp Tyr Val Gln Gln Gln
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Asp Asp Ile Leu Thr Thr Ser Arg Ala Gln Asn Ile Asn Asn Val Asn
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Gly Gln Thr Glu Gln Thr Asn Thr Ser Gly Ile Lys Glu Arg Pro Pro
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Ile Lys Phe Glu Ile His Ile Val Lys Val Arg Ile Val Gly Leu Ala
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Gly Val His Phe Lys Lys Val Ser Gly Asn Thr Trp Leu Tyr Lys Glu
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Leu Ala Ser Tyr Ile Leu Lys Glu Leu Asn Leu
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<210> 3

<211> 423

<212> PRT

<213> Schizosaccharomyces pombe



&lt;400&gt; 3

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			20					25					30		
His	Gln	Arg	Ser	Ile	Ser	Asp	Phe	Val	Gly	Thr	Ala	Gly	Pro	Gly	Arg
		35					40					45			
Gln	Val	Gly	Asn	Trp	Ile	Ile	Lys	Lys	Thr	Ile	Gly	Ala	Gly	Ser	Met
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Gly	Lys	Val	Lys	Leu	Val	Val	Asn	Ile	Leu	Thr	Gly	Glu	Lys	Ala	Ala
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Leu	Lys	Met	Ile	Pro	Phe	Thr	Pro	Asn	Asn	Thr	Ser	Gln	Thr	Val	Arg
				85					90					95	
Val	Gln	Arg	Glu	Ala	Leu	Leu	Gly	Arg	Leu	Leu	Arg	His	Pro	Asn	Ile
			100					105					110		
Cys	Arg	Val	Ile	Asp	Cys	Ile	Arg	Thr	Pro	Ala	Cys	Thr	Tyr	Ile	Leu
		115					120					125			
Phe	Glu	Tyr	Val	Pro	Gly	Gly	Gln	Leu	Leu	Glu	Tyr	Ile	Leu	Ala	Arg
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Gly	Lys	Leu	Asp	Glu	Asp	Leu	Ala	Arg	Ser	Phe	Ala	Met	Gln	Leu	Ile
145					150					155					160
Asn	Ala	Leu	Val	Tyr	Leu	His	Lys	Asn	Phe	Ile	Val	His	Arg	Asp	Leu
				165					170					175	
Lys	Ile	Glu	Asn	Val	Leu	Leu	Thr	Gln	Asp	Ser	Arg	Gln	Val	Lys	Leu
			180					185					190		
Ile	Asp	Phe	Gly	Leu	Ser	Asn	Phe	Tyr	Ser	Lys	Asp	Asp	Leu	Leu	Arg
	195						200					205			
Thr	Tyr	Cys	Gly	Ser	Leu	Tyr	Phe	Ala	Ala	Pro	Glu	Leu	Leu	Asp	Ala
	210					215					220				
Lys	Pro	Tyr	Ile	Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Leu	Gly	Val	Val
225					230					235					240
Ile	Tyr	Val	Met	Val	Cys	Gly	Arg	Val	Pro	Phe	Asp	Asp	Val	Ser	Val
				245					250					255	
Pro	Met	Leu	His	Ser	Lys	Ile	Lys	Ser	Gly	Lys	Leu	Glu	Phe	Pro	Ser
			260					265					270		
Tyr	Ile	Ser	Glu	Asp	Cys	Cys	Ser	Leu	Ile	Ala	Ala	Met	Leu	Asn	Val
		275					280					285			
Asn	Pro	Arg	Lys	Arg	Cys	Ser	Leu	Glu	Gln	Ala	Ala	Lys	Phe	Pro	Trp
	290					295						300			

Leu Lys Lys Asn Ser Phe Cys Leu Tyr Leu Pro Ile Pro Leu Thr Ser  
 305 310 315 320  
 Ile Pro Ser Thr Pro Ser Ile Arg Ser His Val Phe Lys Pro Pro Phe  
 325 330 335  
 Asn Leu Lys Val Leu Gln Leu Leu His Glu His Gly Leu Ala Ser Ile  
 340 345 350  
 Pro Glu Leu Lys His Glu Leu Tyr Met Ala Tyr Ile Glu Arg Lys Thr  
 355 360 365  
 Thr Ser Leu Val Cys Leu Tyr Leu Leu Gly Val Glu Ser Leu Ala Pro  
 370 375 380  
 Ala Leu Arg Ile Pro Thr Ala Leu Pro Pro Val Tyr Ser Arg His Gln  
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 Arg His His Ser Glu Ile Leu Gly Ala Met Asp Leu Thr Glu Lys Ile  
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 Thr Ala Met Gln Cys Pro Pro  
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<210> 4  
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 Arg His His Asn Leu Val Asp Ala Phe Met Gln Ser Pro Ser Tyr Ser  
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 Thr Gln Pro Lys Ser Ala Val Glu Pro Leu Gly Leu Ser Phe Ser Pro  
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 Gly Tyr Ile Ser Pro Ser Ser Gln Ser Pro His His Gly Pro Val Arg  
 65 70 75 80  
 Ser Pro Ser Ser Arg Lys Pro Leu Pro Ala Ser Pro Ser Arg Thr Arg  
 85 90 95  
 Asp His Ser Leu Arg Val Pro Val Ser Gly His Ser Tyr Ser Ala Asp  
 100 105 110  
 Glu Lys Pro Arg Glu Arg Arg Lys Val Ile Gly Asn Tyr Val Leu Gly  
 115 120 125  
 Lys Thr Ile Gly Ala Gly Ser Met Gly Lys Val Lys Val Ala His His  
 130 135 140

Leu	Lys	Thr	Gly	Glu	Gln	Phe	Ala	Ile	Lys	Ile	Val	Thr	Arg	Leu	His
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Pro	Asp	Ile	Thr	Lys	Ala	Lys	Ala	Ala	Ala	Ser	Ala	Glu	Ala	Thr	Lys
				165					170					175	
Ala	Ala	Gln	Ser	Glu	Lys	Asn	Lys	Glu	Ile	Arg	Thr	Val	Arg	Glu	Ala
			180					185					190		
Ala	Leu	Ser	Thr	Leu	Leu	Arg	His	Pro	Tyr	Ile	Cys	Glu	Ala	Arg	Asp
		195					200					205			
Val	Tyr	Ile	Thr	Asn	Ser	His	Tyr	Tyr	Met	Val	Phe	Glu	Phe	Val	Asp
	210					215					220				
Gly	Gly	Gln	Met	Leu	Asp	Tyr	Ile	Ile	Ser	His	Gly	Lys	Leu	Lys	Glu
225					230					235					240
Lys	Gln	Ala	Arg	Lys	Phe	Val	Arg	Gln	Ile	Gly	Ser	Ala	Leu	Ser	Tyr
				245					250					255	
Leu	His	Gln	Asn	Ser	Val	Val	His	Arg	Asp	Leu	Lys	Ile	Glu	Asn	Ile
			260					265					270		
Leu	Ile	Ser	Lys	Thr	Gly	Asp	Ile	Lys	Ile	Ile	Asp	Phe	Gly	Leu	Ser
		275				280						285			
Asn	Leu	Tyr	Arg	Arg	Gln	Ser	Arg	Leu	Arg	Thr	Phe	Cys	Gly	Ser	Leu
	290					295					300				
Tyr	Phe	Ala	Ala	Pro	Glu	Leu	Leu	Asn	Ala	Gln	Pro	Tyr	Ile	Gly	Pro
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Glu	Val	Asp	Val	Trp	Ser	Phe	Gly	Ile	Val	Leu	Tyr	Val	Leu	Val	Cys
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Gly	Lys	Val	Pro	Phe	Asp	Asp	Gln	Asn	Met	Ser	Ala	Leu	His	Ala	Lys
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Ile	Lys	Lys	Gly	Thr	Val	Glu	Tyr	Pro	Ser	Tyr	Leu	Ser	Ser	Asp	Cys
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Lys	Gly	Leu	Leu	Ser	Arg	Met	Leu	Val	Thr	Asp	Pro	Leu	Lys	Arg	Ala
	370					375					380				
Thr	Leu	Glu	Glu	Val	Leu	Asn	His	Pro	Trp	Met	Ile	Arg	Asn	Tyr	Glu
385					390					395					400
Gly	Pro	Pro	Ala	Ser	Phe	Ala	Pro	Glu	Arg	Ser	Pro	Ile	Thr	Leu	Pro
				405					410					415	
Leu	Asp	Pro	Glu	Ile	Ile	Arg	Glu	Met	Asn	Gly	Phe	Asp	Phe	Gly	Pro
			420					425					430		
Pro	Glu	Lys	Ile	Val	Arg	Glu	Leu	Thr	Lys	Val	Ile	Ser	Ser	Glu	Ala
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Tyr	Gln	Ser	Leu	Ala	Lys	Thr	Gly	Phe	Tyr	Ser	Gly	Pro	Asn	Ser	Ala		
450						455					460						
Asp	Lys	Lys	Lys	Ser	Phe	Phe	Glu	Phe	Arg	Ile	Arg	His	Ala	Ala	His		
465					470					475					480		
Asp	Ile	Glu	Asn	Pro	Ile	Leu	Pro	Ser	Leu	Ser	Met	Asn	Thr	Asp	Ile		
				485					490					495			
Tyr	Asp	Ala	Phe	His	Pro	Leu	Ile	Ser	Ile	Tyr	Tyr	Leu	Val	Ser	Glu		
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Arg	Arg	Val	Tyr	Glu	Lys	Gly	Gly	Asn	Trp	Asn	Arg	Ile	Ala	Lys	Thr		
		515					520					525					
Pro	Val	Ser	Ser	Val	Pro	Ser	Ser	Pro	Val	Gln	Pro	Thr	Ser	Tyr	Asn		
	530					535					540						
Arg	Thr	Leu	Pro	Pro	Met	Pro	Glu	Val	Val	Ala	Tyr	Lys	Gly	Asp	Glu		
545					550					555					560		
Glu	Ser	Pro	Arg	Val	Ser	Arg	Asn	Thr	Ser	Leu	Ala	Arg	Arg	Lys	Pro		
				565					570					575			
Leu	Pro	Asp	Thr	Glu	Ser	His	Ser	Pro	Ser	Pro	Ser	Ala	Thr	Ser	Ser		
			580					585					590				
Ile	Lys	Lys	Asn	Pro	Ser	Ser	Ile	Phe	Arg	Arg	Phe	Ser	Ser	Arg	Arg		
	595						600					605					
Lys	Gln	Asn	Lys	Ser	Ser	Thr	Ser	Thr	Leu	Gln	Ile	Ser	Ala	Pro	Leu		
	610					615					620						
Glu	Thr	Ser	Gln	Ser	Pro	Pro	Thr	Pro	Arg	Thr	Lys	Pro	Ser	His	Lys		
625					630					635					640		
Pro	Pro	Val	Ser	Tyr	Lys	Asn	Lys	Leu	Val	Thr	Gln	Ser	Ala	Ile	Gly		
				645				650						655			
Arg	Ser	Thr	Ser	Val	Arg	Glu	Gly	Arg	Tyr	Ala	Gly	Ile	Ser	Ser	Gln		
			660					665					670				
Met	Asp	Ser	Leu	Asn	Met	Asp	Ser	Thr	Gly	Pro	Ser	Ala	Ser	Asn	Met		
	675						680					685					
Ala	Asn	Ala	Pro	Pro	Ser	Val	Arg	Asn	Asn	Arg	Val	Leu	Asn	Pro	Arg		
	690					695					700						
Gly	Ala	Ser	Leu	Gly	His	Gly	Arg	Met	Ser	Thr	Ser	Thr	Thr	Asn	Arg		
705					710					715					720		
Gln	Lys	Gln	Ile	Leu	Asn	Glu	Thr	Met	Gly	Asn	Pro	Val	Asp	Lys	Asn		
				725					730					735			
Ser	Thr	Ser	Pro	Ser	Lys	Ser	Thr	Asp	Lys	Leu	Asp	Pro	Ile	Lys	Pro		
			740					745					750				

Val Phe Leu Lys Gly Leu Phe Ser Val Ser Thr Thr Ser Thr Lys Ser  
 755 760 765  
 Thr Glu Ser Ile Gln Arg Asp Leu Ile Arg Val Met Gly Met Leu Asp  
 770 775 780  
 Ile Glu Tyr Lys Glu Ile Lys Gly Gly Tyr Ala Cys Leu Tyr Lys Pro  
 785 790 795 800  
 Gln Gly Ile Arg Thr Pro Thr Lys Ser Thr Ser Val His Thr Arg Arg  
 805 810 815  
 Lys Pro Ser Tyr Gly Ser Asn Ser Thr Thr Asp Ser Tyr Gly Ser Val  
 820 825 830  
 Pro Asp Thr Val Pro Leu Asp Asp Asn Gly Glu Ser Pro Ala Ser Asn  
 835 840 845  
 Leu Ala Phe Glu Ile Tyr Ile Val Lys Val Pro Ile Leu Ser Leu Arg  
 850 855 860  
 Gly Val Ser Phe His Arg Ile Ser Gly Asn Ser Trp Gln Tyr Lys Thr  
 865 870 875 880  
 Leu Ala Ser Arg Ile Leu Asn Glu Leu Lys Leu  
 885 890

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<211> 1212

<212> PRT

<213> Candida albicans

<400> 5

Met Asn Asn Gln Asp Pro Asp Ser Gln Tyr His Asn Lys Lys Val Tyr  
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 Pro Pro Asn Leu Pro Ser Ile Pro Pro Pro Gln Gln Pro Leu Ser  
 20 25 30  
 Gly Arg Pro Ala Thr Pro Arg Met Leu Arg Ser Ile Ser Gly Thr Leu  
 35 40 45  
 Lys Ser Lys Thr Glu Leu Ala His Ser Asp Lys Gly Gln Glu Ser Asn  
 50 55 60  
 Asn Glu Thr Lys Asn Ser Asn Ser Pro His Tyr Val Pro Asp Thr His  
 65 70 75 80  
 Thr Arg Gln Pro Pro Pro Glu Ser Leu Lys Ser Asn Ile Gln Ala Pro  
 85 90 95  
 Thr Ala Val His Gly Asn Gln Gln Lys Gly Ser Leu Leu Pro Pro Pro  
 100 105 110  
 Ser Ile Pro Asn Pro Asn Thr Met Lys Pro Ala Pro Thr Pro Thr Gly  
 115 120 125

Val	Asp	Gln	Pro	Pro	Ala	Lys	Gln	Lys	Pro	Ser	Pro	Ala	Pro	Lys	Gln	130	135	140
Pro	Gln	Pro	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Phe	His	145	150	155
Arg	Lys	Ser	Ile	Gly	Asp	Trp	Asn	Phe	Val	Lys	Thr	Ile	Gly	Ala	Gly	165	170	175
Ser	Met	Gly	Lys	Val	Lys	Leu	Ala	Gln	His	Asn	Ala	Thr	His	Glu	Ile	180	185	190
Cys	Ala	Val	Lys	Ile	Ile	Pro	Arg	Ala	Ala	Lys	Leu	Tyr	Gln	Arg	Ala	195	200	205
His	Ala	Asn	Asp	Pro	Pro	Pro	Gln	Thr	Thr	Gln	Glu	Ala	Ala	Gln	Arg	210	215	220
His	Lys	Glu	Phe	Glu	Lys	Glu	Val	Ala	Arg	Asp	Arg	Arg	Thr	Ile	Arg	225	230	235
Glu	Gly	Ala	Leu	Gly	Arg	Leu	Leu	Tyr	His	Pro	Phe	Ile	Cys	Arg	Leu	245	250	255
Tyr	Glu	Met	Val	Pro	Met	Thr	Asn	His	Tyr	Tyr	Met	Leu	Phe	Glu	Tyr	260	265	270
Ile	Glu	Gly	Gly	Gln	Met	Leu	Asp	Tyr	Ile	Val	Ala	His	Gly	Ser	Leu	275	280	285
Lys	Glu	Arg	His	Ala	Arg	Lys	Phe	Ala	Arg	Gly	Ile	Ala	Ser	Ala	Leu	290	295	300
Asp	Tyr	Cys	His	Arg	Asn	Asn	Val	Val	His	Arg	Asp	Leu	Lys	Ile	Glu	305	310	315
Asn	Ile	Met	Ile	Asn	Glu	Lys	Gly	Asp	Ile	Lys	Ile	Ile	Asp	Phe	Gly	325	330	335
Leu	Ser	Asn	Leu	Tyr	Ala	Pro	Lys	Asn	Leu	Leu	Lys	Thr	Tyr	Cys	Gly	340	345	350
Ser	Leu	Tyr	Phe	Ala	Ala	Pro	Glu	Leu	Leu	Ser	Ala	Lys	Pro	Tyr	Ile	355	360	365
Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Phe	Gly	Val	Val	Leu	Tyr	Val	Leu	370	375	380
Val	Cys	Gly	Lys	Val	Pro	Phe	Asp	Asp	Gln	Ser	Val	Ser	Val	Leu	His	385	390	395
Glu	Lys	Ile	Lys	Lys	Gly	Asn	Val	Glu	Tyr	Pro	Ala	Phe	Leu	Ser	Arg	405	410	415
Glu	Cys	Val	Ser	Leu	Leu	Ser	Arg	Met	Leu	Val	Val	Asp	Pro	Thr	Lys	420	425	430

Arg	Ala	Ser	Leu	Tyr	Glu	Val	Cys	Ser	His	Pro	Trp	Met	Asn	Lys	Gly
		435					440					445			
Tyr	Asp	Tyr	Lys	Val	Asn	Asn	Tyr	Leu	Pro	Arg	Arg	Glu	Pro	Leu	Arg
	450					455					460				
Leu	Pro	Leu	Asp	Pro	Glu	Ile	Ile	Lys	Thr	Ile	Ala	Asn	Phe	Glu	Leu
465					470					475					480
Gly	Thr	Val	Gln	Gly	Val	Ala	Asp	Glu	Leu	Thr	Ser	Ile	Leu	Thr	Ser
				485					490					495	
Val	Glu	Tyr	Gln	Met	Ser	Cys	Glu	Asn	Trp	Tyr	Lys	Ile	Thr	Glu	Thr
			500					505					510		
Gly	Arg	Glu	Tyr	Ala	Ser	Ser	Gln	Asn	Ala	Gln	Ile	Leu	Pro	Asp	Pro
		515					520					525			
Thr	Gly	Gly	Phe	His	Pro	Leu	Val	Ser	Ile	Tyr	Tyr	Leu	Val	Asp	Glu
	530					535					540				
Met	Arg	Lys	Arg	Lys	Lys	Ala	Lys	Glu	Glu	Ala	Leu	Lys	Ala	Gln	Arg
545					550					555					560
Arg	Ala	Gln	Val	Pro	Thr	Ile	Ala	Val	Pro	Thr	Pro	Lys	Gln	Gln	Gln
				565					570					575	
Gln	Gln	Gln	Pro	Gln	Pro	Ala	Gln	Pro	Gln	Pro	Gln	Pro	Gln	Pro	Glu
			580					585					590		
Val	Ser	Gln	Pro	Leu	Pro	Glu	Pro	Lys	Pro	Val	Pro	Pro	Glu	Glu	Ile
		595					600					605			
Ile	Asn	Pro	Ala	Val	Ala	Thr	Gln	Ala	Gln	Ala	Asn	Met	Thr	Ala	Pro
	610					615					620				
Lys	Ile	Val	Glu	Thr	Phe	Ser	Glu	Thr	Pro	Gln	Arg	Thr	Leu	Asp	Pro
625					630					635					640
Ser	Lys	Gln	Ser	Val	Asp	Glu	Lys	Pro	Ser	Ala	Pro	Gly	Pro	Ser	Ile
				645					650					655	
Ala	Val	Pro	Glu	Gln	Ala	His	Thr	Thr	Ser	Val	Pro	Ser	Ser	Phe	Val
			660					665					670		
Lys	Thr	Gln	Thr	Ser	Ile	Asp	Glu	Asp	Gln	Leu	Ser	Ile	Pro	Glu	Gln
		675					680					685			
Gln	Ser	Pro	Arg	Thr	Ser	Thr	Pro	Gln	Thr	Leu	Asp	Pro	Ala	Lys	Val
		690				695					700				
Val	Gly	Gly	Ser	Ser	Gly	Ser	Ala	Ile	Ser	Ala	Pro	Asn	Ala	Gly	Ser
705					710					715					720
Gly	Ala	Gly	Phe	Asn	Ser	Leu	Leu	Arg	Arg	Leu	Ser	Ser	Lys	Lys	Tyr
				725					730					735	

Lys	Gly	Ala	Ser	Ser	Pro	Lys	Arg	Ser	Thr	Ser	Pro	Ser	Pro	Asn	Val	740	745	750
Glu	Gly	Leu	Ser	Pro	Gln	Pro	Thr	Lys	Ala	Asp	Pro	Met	Val	Arg	Arg	755	760	765
Gly	Val	Ser	Met	Lys	Val	Thr	Ala	Lys	Glu	Lys	Gln	Thr	Asn	Thr	Arg	770	775	780
Pro	Pro	Lys	Ser	Glu	Leu	Ile	Lys	Lys	Lys	Pro	Gln	His	Gly	Arg	Ser	785	790	795
Ser	Ser	Thr	Ser	Asn	Lys	Met	Gln	Gly	Phe	Ile	Pro	Val	Glu	Tyr	Leu	805	810	815
Pro	Pro	Leu	Pro	Thr	Ile	Asp	Thr	Asn	Thr	Asn	Thr	Ile	Val	Ser	Asp	820	825	830
Gly	Ala	Lys	Gln	Gln	Asn	Leu	Thr	Val	Pro	Ser	Thr	Ala	Arg	His	Met	835	840	845
His	Pro	Thr	Ala	Arg	Ala	Lys	Ser	Val	Gly	Gly	Gly	His	Met	Arg	Lys	850	855	860
Asp	Ser	Tyr	Gly	Arg	Val	Ser	His	Gly	Ser	Gln	Asn	Pro	Leu	Pro	Pro	865	870	875
Leu	Pro	Thr	Ser	Met	Ala	Ser	Gln	Asn	Ser	Gln	Glu	Val	Val	Gly	Lys	885	890	895
Asp	Thr	Ser	Glu	Gly	Phe	Phe	Asp	Asp	Val	Gln	Leu	Asp	Asp	Val	Gly	900	905	910
Tyr	Gln	Glu	Val	Pro	Gln	Leu	Thr	Glu	Ser	Glu	Ile	Ile	Glu	Gln	Tyr	915	920	925
Asn	Ile	Ser	Lys	Pro	Asn	Ser	Met	Pro	Ser	Ile	Glu	His	Cys	Lys	Thr	930	935	940
Leu	Phe	Leu	Lys	Gly	Phe	Phe	Ser	Val	Gln	Thr	Thr	Ser	Ala	Lys	Pro	945	950	955
Leu	Pro	Val	Ile	Arg	Tyr	Asn	Ile	Ile	Asn	Val	Leu	Ser	Lys	Leu	Gly	965	970	975
Val	Lys	Phe	Gln	Glu	Val	Lys	Gly	Gly	Phe	Val	Cys	Met	His	Thr	Pro	980	985	990
Ser	Val	Gln	Pro	Ser	His	Ser	Asn	Glu	Leu	Asp	Glu	Glu	Asn	Lys	Leu	995	1000	1005
Tyr	Gly	Asp	Ala	Phe	Lys	Ser	Lys	Ser	Ser	Asp	Ser	Phe	Glu	Ala	Ala	1010	1015	1020
Glu	Pro	Glu	Gly	Ser	Lys	Thr	Pro	Ser	Arg	Gln	Pro	Ser	Leu	Gln	Leu	1025	1030	1035
																		1040



Pro Ser His Thr Pro Thr Thr Pro Ser Gly Pro Lys Ser His Lys Ser  
                   1045                  1050                  1055  
 Ser Asn Ser Ile Gly Ser Ile Gly Gly Asn Val Pro Arg Arg Lys Phe  
                   1060                  1065                  1070  
 Ser Ile Gly Asn Ala Phe Asn Thr Tyr Arg Lys Lys Asn Gly Ser Gln  
                   1075                  1080                  1085  
 Val Met Met Pro Pro Asn Thr Pro Ala Thr Ala Lys Val Ile His Gly  
                   1090                  1095                  1100  
 Leu Tyr Asp Asp Asp Asp Lys Glu Arg Asn Gly Glu Asp Asp Asp Asp  
 1105                  1110                  1115                  1120  
 Glu Asp Asp Tyr Gly Tyr Asp Asp Ser Ala Asp Ser Leu Asn Gly Tyr  
                   1125                  1130                  1135  
 Gly Gly Gly Ser Asp Met Leu Ile Ser Ser Arg Ile Glu Gln Arg Ala  
                   1140                  1145                  1150  
 Lys His Gln Arg Thr Val Ser Ser Ser Ser Gln Lys Ala Ser Lys Ser  
                   1155                  1160                  1165  
 Pro Leu Lys Phe Glu Ile His Ile Val Lys Val Pro Leu Val Gly Leu  
                   1170                  1175                  1180  
 Tyr Gly Val Gln Phe Lys Lys Ile Leu Gly Asn Thr Trp Asn Tyr Lys  
 1185                  1190                  1195                  1200  
 Thr Leu Ala Ser Gln Ile Leu Asn Glu Met Asn Leu  
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<210> 6  
 <211> 800  
 <212> PRT  
 <213> *Saccharomyces cerevisiae*

<400> 6  
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 Asp Arg Asp Arg His Ser Leu Gln Arg Asn Asn Glu Ile Leu His Pro  
           20                  25                  30  
 Ile His Lys Asn Gln Arg Lys His Ala Thr Phe Gly Pro Tyr Ile Ile  
           35                  40                  45  
 Gly Ser Thr Leu Gly Glu Gly Glu Phe Gly Lys Val Lys Leu Gly Trp  
   50                  55                  60  
 Thr Lys Ala Ser Ser Ser Asn Glu Val Pro Lys Gln Val Ala Ile Lys  
   65                  70                  75                  80  
 Leu Ile Arg Arg Asp Thr Ile Lys Lys Asp Ala Asp Lys Glu Ile Lys  
           85                  90                  95

Ile	Tyr	Arg	Glu	Ile	Asn	Ala	Leu	Lys	His	Leu	Thr	His	Pro	Asn	Ile	100	105	110
Ile	Tyr	Leu	Glu	Glu	Val	Leu	Gln	Asn	Ser	Lys	Tyr	Ile	Gly	Ile	Val	115	120	125
Leu	Glu	Phe	Val	Ser	Gly	Gly	Glu	Phe	Tyr	Lys	Tyr	Ile	Gln	Arg	Lys	130	135	140
Arg	Arg	Leu	Lys	Glu	Ser	Ser	Ala	Cys	Arg	Leu	Phe	Ala	Gln	Leu	Ile	145	150	155
Ser	Gly	Val	Asn	Tyr	Met	His	Tyr	Lys	Gly	Leu	Val	His	Arg	Asp	Leu	165	170	175
Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	His	Glu	Asn	Leu	Val	Ile	Thr	180	185	190
Asp	Phe	Gly	Phe	Val	Asn	Glu	Phe	Phe	Glu	Asp	Asn	Glu	Leu	Met	Lys	195	200	205
Thr	Ser	Cys	Gly	Ser	Pro	Cys	Tyr	Ala	Ala	Pro	Glu	Leu	Val	Val	Ser	210	215	220
Thr	Lys	Ala	Tyr	Glu	Ala	Arg	Lys	Ala	Asp	Val	Trp	Ser	Cys	Gly	Val	225	230	235
Ile	Leu	Tyr	Ala	Met	Leu	Ala	Gly	Tyr	Leu	Pro	Trp	Asp	Asp	Asp	His	245	250	255
Glu	Asn	Pro	Thr	Gly	Asp	Asp	Ile	Ala	Arg	Leu	Tyr	Lys	Tyr	Ile	Thr	260	265	270
Gln	Thr	Pro	Leu	Lys	Phe	Pro	Glu	Tyr	Ile	Thr	Pro	Ile	Pro	Arg	Asp	275	280	285
Leu	Leu	Arg	Arg	Ile	Leu	Val	Pro	Asn	Pro	Arg	Arg	Arg	Ile	Asn	Leu	290	295	300
Gln	Thr	Ile	Lys	Arg	His	Val	Trp	Leu	Lys	Pro	His	Glu	Ala	Phe	Leu	305	310	315
Ser	Ile	Gln	Pro	Asn	Tyr	Trp	Asp	Glu	His	Leu	Gln	Lys	Glu	Arg	Pro	325	330	335
Lys	Pro	Pro	Asn	Lys	Gly	Asp	Val	Gly	Arg	His	Ser	Thr	Tyr	Ser	Ser	340	345	350
Ser	Ala	Ser	Ser	Tyr	Ser	Lys	Ser	Arg	Asp	Arg	Asn	Ser	Leu	Ile	Ile	355	360	365
Glu	Ser	Thr	Leu	Glu	Gln	His	Arg	Met	Ser	Pro	Gln	Leu	Ala	Thr	Ser	370	375	380
Arg	Pro	Ala	Ser	Pro	Thr	Phe	Ser	Thr	Gly	Ser	Lys	Val	Val	Leu	Asn	385	390	395
																		400

Asp	Thr	Lys	Asn	Asp	Met	Lys	Glu	Ser	Asn	Ile	Asn	Gly	Glu	Arg	Thr	405	410	415	
Ser	Ala	Ser	Cys	Arg	Tyr	Thr	Arg	Asp	Ser	Lys	Gly	Asn	Gly	Gln	Thr	420	425	430	
Gln	Ile	Glu	Gln	Val	Ser	Ala	Arg	His	Ser	Ser	Arg	Gly	Asn	Lys	His	435	440	445	
Thr	Ser	Val	Ala	Gly	Leu	Val	Thr	Ile	Pro	Gly	Ser	Pro	Thr	Thr	Ala	450	455	460	
Arg	Thr	Arg	Asn	Ala	Pro	Ser	Ser	Lys	Leu	Thr	Glu	His	Val	Lys	Asp	465	470	475	480
Ser	Ser	Gln	Thr	Ser	Phe	Thr	Gln	Glu	Glu	Phe	His	Arg	Ile	Gly	Asn	485	490	495	
Tyr	His	Val	Pro	Arg	Ser	Arg	Pro	Arg	Pro	Thr	Ser	Tyr	Tyr	Pro	Gly	500	505	510	
Leu	Ser	Arg	Asn	Thr	Ala	Asp	Asn	Ser	Leu	Ala	Asp	Ile	Pro	Val	Asn	515	520	525	
Lys	Leu	Gly	Ser	Asn	Gly	Arg	Leu	Thr	Asp	Ala	Lys	Asp	Pro	Val	Pro	530	535	540	
Leu	Asn	Ala	Ile	His	Asp	Thr	Asn	Lys	Ala	Thr	Ile	Ser	Asn	Asn	Ser	545	550	555	560
Ile	Met	Leu	Leu	Ser	Glu	Gly	Pro	Ala	Ala	Lys	Thr	Ser	Pro	Val	Asp	565	570	575	
Tyr	His	Tyr	Ala	Ile	Gly	Asp	Leu	Asn	His	Gly	Asp	Lys	Pro	Ile	Thr	580	585	590	
Glu	Val	Ile	Asp	Lys	Ile	Asn	Lys	Asp	Leu	Thr	His	Lys	Ala	Ala	Glu	595	600	605	
Asn	Gly	Phe	Pro	Arg	Glu	Ser	Ile	Asp	Pro	Glu	Ser	Thr	Ser	Thr	Ile	610	615	620	
Leu	Val	Thr	Lys	Glu	Pro	Thr	Asn	Ser	Thr	Asp	Glu	Asp	His	Val	Glu	625	630	635	640
Ser	Gln	Leu	Glu	Asn	Val	Gly	His	Ser	Ser	Asn	Lys	Ser	Asp	Ala	Ser	645	650	655	
Ser	Asp	Lys	Asp	Ser	Lys	Lys	Ile	Tyr	Glu	Lys	Lys	Arg	Phe	Ser	Phe	660	665	670	
Met	Ser	Leu	Tyr	Ser	Ser	Leu	Asn	Gly	Ser	Arg	Ser	Thr	Val	Glu	Ser	675	680	685	
Arg	Thr	Ser	Lys	Gly	Asn	Ala	Pro	Pro	Val	Ser	Ser	Arg	Asn	Pro	Ser	690	695	700	

Gly Gln Ser Asn Arg Ser Asn Ile Lys Ile Thr Gln Gln Gln Pro Arg  
 705 710 715 720  
 Asn Leu Ser Asp Arg Val Pro Asn Pro Asp Lys Lys Ile Asn Asp Asn  
 725 730 735  
 Arg Ile Arg Asp Asn Ala Pro Ser Tyr Ala Glu Ser Glu Asn Pro Gly  
 740 745 750  
 Arg Ser Val Arg Ala Ser Val Met Val Ser Thr Leu Arg Glu Glu Asn  
 755 760 765  
 Arg Ser Glu Leu Ser Asn Glu Gly Asn Asn Val Glu Ala Gln Thr Ser  
 770 775 780  
 Thr Ala Arg Lys Val Leu Asn Phe Phe Lys Arg Arg Ser Met Arg Val  
 785 790 795 800

<210> 7

<211> 865

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 7

Met Ser Tyr Thr Asn Lys Arg His Thr Tyr Tyr Gly Gly Phe Thr Asn  
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 Asp Leu Ser Asp Thr Phe Gln Tyr Pro Gln Arg Thr Asp Glu Gln Arg  
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 Arg Lys His Val Thr Phe Gly Pro Tyr Ile Leu Gly Ser Thr Leu Gly  
 35 40 45  
 Glu Gly Glu Phe Gly Lys Val Lys Leu Gly Trp Pro Lys Asn Phe Ser  
 50 55 60  
 Asn Ser Ser Asn Ser Thr Phe Asp Phe Pro Lys Gln Val Ala Ile Lys  
 65 70 75 80  
 Leu Ile Lys Arg Asp Ser Ile Ser Asn Asp Tyr Arg Lys Glu Val Lys  
 85 90 95  
 Ile Tyr Arg Glu Ile Asn Ala Leu Lys His Leu Ser His Pro Asn Ile  
 100 105 110  
 Val Lys Leu Glu Glu Val Leu Gln Asn Ser Arg Tyr Ile Gly Ile Val  
 115 120 125  
 Leu Glu Tyr Ala Cys Gly Gly Glu Phe Tyr Lys Tyr Ile Gln Lys Lys  
 130 135 140  
 Arg Arg Leu Lys Glu Met Asn Ala Cys Arg Leu Phe Ser Gln Leu Ile  
 145 150 155 160  
 Ser Gly Val His Tyr Ile His Ser Lys Gly Leu Val His Arg Asp Leu  
 165 170 175

Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	Asn	Glu	Asn	Leu	Val	Ile	Thr	180	185	190
Asp	Phe	Gly	Phe	Val	Asn	Glu	Phe	Cys	Ser	Arg	Asn	Glu	Leu	Met	Lys	195	200	205
Thr	Ser	Cys	Gly	Ser	Pro	Cys	Tyr	Ala	Ala	Pro	Glu	Leu	Val	Ile	Ser	210	215	220
Ala	Glu	Pro	Tyr	Glu	Ala	Arg	Lys	Ala	Asp	Ile	Trp	Ser	Cys	Gly	Val	225	230	235
Ile	Leu	Tyr	Ala	Ile	Leu	Ala	Gly	Tyr	Leu	Pro	Trp	Asp	Asp	Asp	Pro	245	250	255
Asn	Asn	Pro	Glu	Gly	Ser	Asp	Ile	Gly	Arg	Leu	Tyr	Asn	Tyr	Ile	Asn	260	265	270
Ser	Thr	Pro	Leu	Lys	Phe	Pro	Asp	Tyr	Ile	Leu	Pro	Ile	Pro	Arg	Asp	275	280	285
Leu	Leu	Arg	Arg	Met	Leu	Val	Ser	Asp	Pro	Lys	Lys	Arg	Ile	Asn	Leu	290	295	300
Lys	Gln	Ile	Lys	Lys	His	Glu	Trp	Leu	Lys	Pro	His	Ser	Ser	Phe	Leu	305	310	315
Ser	Ile	Thr	Pro	Asp	Glu	Trp	Asp	Lys	Leu	Asn	Asn	Thr	Gln	Ser	Val	325	330	335
Phe	Arg	Leu	Ala	Lys	Pro	Arg	Arg	Arg	Tyr	Gly	Ser	Arg	Pro	Gln	Ser	340	345	350
Ser	Cys	Ser	Thr	Ser	Ser	Leu	Gly	Ser	Arg	Ser	Asp	Lys	Arg	Asp	Ser	355	360	365
Leu	Val	Ile	Asp	Ser	Thr	Leu	Ile	Thr	Phe	Pro	Ala	Pro	Pro	Gln	Glu	370	375	380
Ser	Gln	Asn	His	Ile	Ile	Thr	Arg	Pro	Ala	Ser	Ile	Ala	Ser	Asp	Gln	385	390	395
Arg	Leu	Ser	Pro	Ile	Arg	Arg	Ser	Asn	Arg	His	Asn	Arg	Ser	Asn	Ser	405	410	415
Ala	Ala	Ser	Val	Ala	Leu	Gln	Ala	Val	Val	Asn	Ala	Asp	Arg	Glu	Tyr	420	425	430
Val	Leu	Ser	His	Glu	Gln	Ser	Leu	Ser	Pro	Val	Gln	Asn	Ile	Arg	Gln	435	440	445
Thr	Thr	Gly	Asn	Met	Thr	Ala	Ser	Leu	Ser	Pro	Pro	Pro	Ala	Ile	Ser	450	455	460
Pro	Gly	Asp	Ile	Ile	Ile	Glu	Thr	Thr	Pro	Ile	Lys	Arg	Asn	Thr	Ile	465	470	475
																		480

Ser	Gly	Ser	Ser	Ile	Val	Pro	Ser	Leu	Glu	Glu	Glu	Ser	Ser	Thr	Thr	485	490	495
Met	Gln	Thr	Ser	Lys	Ile	Gln	Pro	Asn	Asn	Met	Ala	Ser	Ser	Gln	Asn	500	505	510
His	Gln	Tyr	Asn	Lys	Asn	Lys	Thr	Gln	Asn	Ser	Leu	Gln	Ser	Ala	Lys	515	520	525
Asn	Phe	Tyr	Arg	Thr	Ser	Ser	Ser	Ser	His	Thr	Lys	Pro	Arg	Pro	Thr	530	535	540
Ser	Tyr	His	Pro	Gly	Ser	Tyr	Thr	Thr	Pro	Pro	Tyr	Asn	Ser	Asn	Thr	545	550	555
Leu	Ser	Ile	Tyr	Glu	Ile	Asn	Glu	Lys	Ala	Lys	Ser	Ser	Ala	Ser	Ser	565	570	575
Gln	Thr	Leu	Asn	Gln	Arg	Asp	Thr	Ser	Pro	Phe	Asp	Ser	Thr	Pro	Tyr	580	585	590
Leu	Ala	Leu	Asp	Thr	Cys	Ile	Thr	Ser	Ser	Ser	Ser	Ile	Glu	Ser	Ser	595	600	605
Pro	Lys	Leu	Ile	Thr	His	Gly	Gln	Phe	Ser	Val	Ala	Lys	Pro	Ser	Val	610	615	620
Asp	Leu	Gln	Ser	Val	Ser	Gly	Asp	Leu	Ile	Lys	Tyr	Lys	Arg	Asp	Ala	625	630	635
Asp	Val	Val	Thr	Arg	Ile	Tyr	Asp	Glu	Lys	Tyr	Lys	Gln	Lys	Arg	Lys	645	650	655
Ser	Leu	Arg	Tyr	Ser	Gly	Ile	Phe	Ser	Asp	Ile	Ser	Cys	Asp	Thr	Val	660	665	670
Thr	Glu	Glu	Ser	Asp	Glu	Leu	Arg	Pro	Pro	Glu	Ser	Pro	Leu	Gln	Gln	675	680	685
His	Glu	Gly	Gln	Glu	Ser	Ile	Asp	Lys	Ala	Lys	Thr	Glu	Asp	Thr	Ser	690	695	700
Glu	Lys	Gly	Ser	Lys	Ser	Ser	Asn	Ile	Ala	Lys	Ala	Thr	Ala	Gln	Lys	705	710	715
His	Val	Asn	Asn	His	Leu	Glu	Arg	Ser	Leu	Asn	Glu	Ala	Glu	Ser	Thr	725	730	735
Lys	Lys	Arg	Phe	Ser	Phe	Leu	Ser	Leu	Tyr	Ser	Tyr	Asp	Thr	Ser	Lys	740	745	750
Ser	Ser	Leu	Tyr	Ser	Ser	Met	Asp	Ser	Lys	Arg	Lys	Pro	Ser	Pro	Pro	755	760	765
Ser	Gln	Arg	Arg	Pro	Lys	Lys	Asp	Asp	Ser	Tyr	Gln	Thr	Asn	Ser	Lys	770	775	780

Asn His Tyr Ile Thr Ala Ser Asn Met Gln Thr Ser His Gln Val Ser  
 785 790 795 800  
 Lys Asp Leu Pro Ala Pro Thr Met Val Gln Asn Lys Cys Thr Leu Glu  
 805 810 815  
 Thr Lys Lys Ala Val Arg Ser Asn Arg Ser Ser Ile Met Val Ser Glu  
 820 825 830  
 Val Asn Lys Ala Ser Val Asp Asn Lys Ala Ala Gln Ser Pro Glu His  
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 Ser Thr Ala Lys Arg Val Leu Gly Phe Phe Lys Arg Arg Ser Met Lys  
 850 855 860  
 Ile  
 865

<210> 8  
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 <212> PRT  
 <213> Candida albicans

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 Gln Arg Ser Asn Ser Ser Ser Ser Thr Ser Ser Tyr Arg Ile Pro Ser  
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 Gly Asn Ser Cys Ile Pro Arg Thr Val Glu Met Pro Ser Leu Pro Pro  
 35 40 45  
 Thr Ser Thr His His Gln His Gln Gln Met Pro Ser Ser Ser Ser His  
 50 55 60  
 Ala His Ile Ala Lys Lys Ile His Arg Glu Val Arg Phe Gly Ala Tyr  
 65 70 75 80  
 Ile Leu Gly Ser Thr Leu Gly Glu Gly Glu Phe Gly Lys Val Lys Leu  
 85 90 95  
 Gly Trp Arg Lys Asp Gly Lys His Pro Ser Gln Val Ala Ile Lys Leu  
 100 105 110  
 Ile Lys Arg Ser Thr Ile Thr Lys Asp Ser Asp Ser Glu Ile Lys Ile  
 115 120 125  
 His Arg Glu Ile Asn Ser Leu Lys Leu Leu Asn His Pro Asn Ile Val  
 130 135 140  
 Asn Leu Val Glu Val Met Lys Ser Gly Lys Tyr Ile Gly Ile Val Leu  
 145 150 155 160  
 Glu Tyr Ala Ser Gly Gly Glu Leu Phe Asp Tyr Ile Leu Gln His Lys  
 165 170 175

Tyr	Leu	Lys	Glu	Asn	Val	Ala	Lys	Lys	Leu	Phe	Ala	Gln	Leu	Val	Ser	180	185	190
Gly	Val	Asp	Tyr	Met	His	Ala	Lys	Gly	Leu	Ile	His	Arg	Asp	Leu	Lys	195	200	205
Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	His	Arg	Asn	Val	Ile	Ile	Ser	Asp	210	215	220
Phe	Gly	Phe	Val	Asn	Ser	Tyr	Asn	Arg	Asp	Lys	Asn	Asp	Leu	Met	Lys	225	230	235
Thr	Ser	Cys	Gly	Ser	Pro	Cys	Tyr	Ala	Ala	Pro	Glu	Leu	Val	Leu	Ser	245	250	255
Gln	Thr	Ala	Tyr	Glu	Gly	Arg	Lys	Val	Asp	Ile	Trp	Ser	Leu	Gly	Val	260	265	270
Ile	Leu	Tyr	Ala	Met	Leu	Ala	Gly	Tyr	Leu	Pro	Phe	Asp	Asp	Asp	Pro	275	280	285
Glu	Asn	Glu	Asp	Gly	Ser	Asp	Ile	Ile	Lys	Leu	Tyr	His	Tyr	Ile	Cys	290	295	300
Lys	Thr	Pro	Leu	Thr	Phe	Pro	Glu	Tyr	Val	Ser	Pro	Leu	Ala	Arg	Asp	305	310	315
Leu	Leu	Arg	Lys	Ile	Ile	Val	Ser	Asp	Pro	Lys	Lys	Arg	Ile	Ser	Ile	325	330	335
Asp	Asp	Ile	Arg	Asn	His	Pro	Trp	Leu	Ser	Ser	His	Ala	Asn	Leu	Leu	340	345	350
Ser	Ile	Arg	Gln	Pro	Glu	Trp	Asp	Lys	Val	His	Ser	Glu	Lys	Gln	Gln	355	360	365
Pro	Ile	Ala	Val	Glu	Pro	Pro	Gln	Pro	Asn	Lys	Arg	Tyr	Ser	Met	Ile	370	375	380
Asn	Glu	Arg	Thr	Asn	Ser	Ser	Ser	Leu	Met	Ser	Pro	Ala	Pro	Arg	Val	385	390	395
Thr	His	Thr	Gln	Pro	Leu	Ser	Ser	His	Ala	Arg	Ser	Tyr	Ser	Ser	Thr	405	410	415
Ser	Ile	Ser	Leu	Leu	Tyr	Ser	Ser	Pro	Ser	Ala	Thr	Pro	Ser	Met	Ala	420	425	430
Asn	Ala	Val	Thr	Asn	Gly	Glu	Gly	Ala	Thr	Thr	Thr	Thr	Thr	Asn	Gly	435	440	445
Ser	Ile	Asn	Glu	Ser	Asn	Asp	Thr	Leu	Gln	Leu	Ser	Gly	Thr	Pro	Ser	450	455	460
Pro	Lys	Lys	Pro	Ser	Thr	Val	Ser	Pro	Val	Arg	Gly	His	Gln	Lys	Ser	465	470	475
																		480



Ala	Ser	Ile	Ser	Asn	Ser	Tyr	Ser	Ser	Ala	Ser	Ile	Ala	Leu	Lys	Ala	485	490	495
Val	Val	His	Glu	Glu	Asn	Arg	Leu	His	Asn	His	Gln	Gln	Ser	Gln	Gln	500	505	510
Tyr	Ile	Pro	Arg	Ser	Ser	Thr	Ile	Ser	Thr	Ile	Val	Glu	Ser	Pro	Thr	515	520	525
Lys	Ala	Asn	Thr	Ala	Thr	Glu	Thr	Glu	Thr	Thr	Asp	Gly	His	Lys	Ile	530	535	540
Leu	Leu	Pro	Pro	Pro	Ser	Lys	Asp	Ala	Gln	Lys	Leu	Pro	His	Ala	Ala	545	550	555
Lys	Lys	Pro	Arg	Pro	Thr	Ser	Tyr	His	Pro	Ser	Ser	Met	Ser	Ser	Ala	565	570	575
Leu	Ile	His	Asn	Asn	Gln	Asn	Pro	Thr	Asp	Val	Leu	Lys	Met	Pro	Ser	580	585	590
Pro	Ile	Asn	Phe	Pro	Met	Thr	Gln	Phe	Ile	Ser	Thr	Ser	Pro	Pro	Lys	595	600	605
Ser	Asn	Gly	Ser	Leu	Asn	Asp	Ser	Gly	Asn	Phe	Thr	Asn	Cys	Ser	Pro	610	615	620
Lys	Ala	Thr	Ser	Arg	Arg	Asn	Ser	Val	Val	Thr	His	Val	His	Val	Asn	625	630	635
Gly	Val	Leu	Ser	Lys	Glu	Asn	Leu	Ile	His	Ser	Ser	Ser	Ser	Pro	Asp	645	650	655
Asn	Lys	Arg	Asn	Ser	Val	Leu	Ser	Tyr	Leu	Glu	Asp	Lys	Ile	Asp	Thr	660	665	670
Leu	Glu	Leu	Thr	Glu	Ser	His	Ser	Pro	Ser	Lys	Asn	Thr	Phe	Glu	Glu	675	680	685
Ile	Val	Asp	Ala	Ala	Ile	Ala	Thr	Pro	Glu	Ile	Asn	Gln	Val	Pro	Val	690	695	700
Phe	Asp	Ser	Gln	Thr	Ser	Pro	Asn	Gly	Ile	Gly	Leu	Asp	Ile	Lys	His	705	710	715
Lys	Glu	Phe	Asp	Glu	Thr	Ser	Leu	Val	Val	Glu	Lys	Lys	Ser	Lys	Glu	725	730	735
Thr	Val	Ser	Asp	Ser	Lys	Ser	Glu	Glu	Ser	Thr	Lys	Glu	Thr	Gln	Gln	740	745	750
Gln	Glu	Asn	Val	Val	Met	Tyr	Glu	Pro	Ile	Val	Pro	Val	Glu	Glu	Tyr	755	760	765
Ile	Lys	Lys	Pro	Glu	Glu	Val	Asn	Ser	Val	Glu	Ala	Lys	Gln	Pro	Glu	770	775	780

Glu Val Lys Ser Glu Asp Lys Ser Leu Gln Gly Gln Lys Ser Gln Gln  
 785 790 795 800  
 Gln Gln Gln Gln Pro Glu Lys His Ser Ala Asp Ile Gly Lys Thr Lys  
 805 810 815  
 Val Asp Leu Lys Lys Ser Ala Ser Gln Lys Lys Lys Val Lys Glu Glu  
 820 825 830  
 Ser Ile Lys Lys Gln Lys Asp Val Asp Ser Lys Pro Ile Glu Arg Arg  
 835 840 845  
 His Thr Ile Ala Ala Arg Arg His His Asn Asp Glu Asn Lys Glu Asn  
 850 855 860  
 Lys Asp Val Lys Lys Arg Asn Arg Phe Ser Leu Leu Ser Phe Tyr Ser  
 865 870 875 880  
 Ser Tyr Asn Ser Ser Asn Ser Asn Val Ser Leu Ala Thr Ser Lys Val  
 885 890 895  
 Pro Ser Asn Ser Glu Asn Asn Thr Thr Val Leu Lys Pro Thr Ser Met  
 900 905 910  
 Asn Thr Thr Arg Lys Val Leu Glu Pro Ser Asn Glu Thr Asn Ile Met  
 915 920 925  
 Arg Lys Glu Thr Lys Gln Thr Asn Ser Asn Gly Ser Thr Thr Ser Lys  
 930 935 940  
 Ser Thr Thr Ser Ser Ser Ser Ser Ser Ala Pro Ala Ala Ser Ser Ser  
 945 950 955 960  
 Ser Ser Ser Ser Thr Ser Lys Arg Ala Ser Thr Ala Thr Lys Glu Thr  
 965 970 975  
 Ser Ala Ala Arg Lys Val Met Asp Phe Phe Lys Arg Arg Ser Val Arg  
 980 985 990  
 Val Gly

<210> 9  
 <211> 629  
 <212> PRT  
 <213> Schizosaccharomyces pombe

<400> 9  
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 Gln Asp Ile Ile Ser Asn Ser Tyr Gln Lys Pro Leu Ser Leu Val Asp  
 20 25 30  
 Ser Thr Asp Arg Ala Leu Pro Asp Ser Ser Leu Ser Ser Leu Ser Arg  
 35 40 45

Ser	Thr	Phe	Gln	Phe	His	Lys	His	His	Leu	Ser	Gly	Asn	Glu	Asn	Pro	50	55	60
Gln	Pro	Ser	Ser	Glu	Ser	Pro	Tyr	Phe	Thr	Asn	Asn	Glu	Arg	Leu	Asn	65	70	75
Ser	Ser	Ser	Phe	Pro	Gln	Ile	His	Asp	Asn	Gln	Leu	Ser	Pro	Ser	Phe	85	90	95
Asn	Thr	Ser	Tyr	Gln	Ala	Ile	Pro	Ser	Ser	Ser	Ser	Asn	Arg	Ser	Arg	100	105	110
Gly	Gly	Pro	Tyr	Thr	Pro	Ser	Ile	Arg	Asp	Asp	Ser	Leu	Leu	Ala	Leu	115	120	125
Leu	Ser	Phe	Ser	Ser	Asn	His	Arg	Leu	His	Ser	Met	Pro	Ser	Gln	Leu	130	135	140
Gln	Pro	Phe	Asn	Asn	Ala	Ser	Ser	Tyr	Thr	Thr	Pro	Met	Ala	Pro	Phe	145	150	155
Thr	Ala	Ser	Phe	Ser	Asn	Lys	Val	Ser	His	Ser	Ala	Tyr	Pro	Thr	Arg	165	170	175
Arg	Leu	Pro	Ser	Gln	Ala	Lys	Lys	Thr	Ser	Ala	Ile	Glu	Arg	Val	Pro	180	185	190
Val	Asn	Leu	Asn	Phe	Leu	Gln	Ser	Asp	Asn	Leu	Val	Val	Gln	Ser	Ser	195	200	205
Pro	Gln	Thr	Asn	Phe	Glu	Asn	Phe	Glu	Phe	Pro	Lys	Lys	Ile	Pro	Ser	210	215	220
Lys	Glu	Asp	Leu	Glu	Thr	Arg	Glu	Val	Leu	Leu	Leu	Pro	Pro	Gln	Thr	225	230	235
Ser	Lys	Leu	Ser	Asn	Lys	Asn	Leu	Asp	Thr	Lys	Ser	Phe	Thr	Asp	Val	245	250	255
Asn	Lys	Ile	Ser	Gln	Gln	Gly	Phe	Val	Glu	Ile	Ser	Ser	Asn	Ser	Ser	260	265	270
Lys	Val	Thr	Pro	Asn	Thr	Ser	Leu	His	Gln	Ser	Phe	Gly	Ile	Ala	Ser	275	280	285
Ser	Ser	Ser	Asn	Asn	Tyr	Met	Gln	Thr	Ser	Ser	Glu	Leu	Thr	Ser	Ser	290	295	300
Thr	Glu	Lys	Met	Asn	Gly	Ser	His	Pro	Leu	Gln	Leu	Ser	Asn	Lys	Ser	305	310	315
Leu	Leu	Ser	Ile	His	Leu	Met	Gln	Ser	Lys	Asn	Gln	Gly	His	Val	Ser	325	330	335
Met	Thr	Gly	Ser	Asp	Lys	Leu	Ser	Ser	His	Val	Gln	Ser	Glu	Thr	Glu	340	345	350

Asn Ala Pro Val Ser Lys Pro Ser Lys Pro Asn Thr Leu Thr Glu Asp  
                   355                                  360                                  365  
 Glu Lys Pro Leu Gln Ser Thr Lys Leu Pro Gly Asn Ser Leu Thr Val  
                   370                                  375                                  380  
 Gly Glu Leu Tyr Gln Glu Pro Lys Ser Ile Gln Leu Pro Glu Leu Ser  
 385                                  390                                  395                                  400  
 Val Ser Arg Thr Thr Tyr Ser Ala Gln Ser Ser Ser Val Lys Asn Cys  
                                   405                                  410                                  415  
 Asn Glu Arg Ile Pro Ser Ala Lys Ala Leu Lys Lys Gln Lys His Leu  
                                   420                                  425                                  430  
 Val Pro Glu Asn Lys Ser Lys Leu Gln Tyr Val Trp Gln Lys Lys Glu  
                                   435                                  440                                  445  
 Ser Leu Pro Tyr Ala Asn Leu Thr Ser Ala Ser Asn Thr His Phe Phe  
                   450                                  455                                  460  
 Leu Ser Glu Asn Gln Asn Asp Thr Ser Glu Arg Leu Thr Arg Thr Leu  
 465                                  470                                  475                                  480  
 Arg Lys Ser Thr Lys Asn Tyr Thr Phe Gly Ser Tyr Ile Leu Gly Arg  
                                   485                                  490                                  495  
 Thr Ile Gly Thr Gly Glu Phe Gly Lys Val Lys Leu Gly Trp Pro Leu  
                                   500                                  505                                  510  
 Pro Lys Ala Asn Ser Thr Ile His Arg Ser Thr Pro Gln Val Val Ile  
                   515                                  520                                  525  
 Lys Ile Val Leu Ser Thr Lys Gln Asn Cys Gln Thr Ser Arg Leu Met  
                   530                                  535                                  540  
 Arg Glu Val Ala Ile Leu Lys Gly Leu Gly Asn Asn His Pro His Ile  
 545                                  550                                  555                                  560  
 Val Lys Tyr Leu Asp Phe Val Lys Thr Lys His His Phe Gly Ile Val  
                                   565                                  570                                  575  
 Leu Asp Tyr Val Asn Gly Gly Glu Leu Phe Asp Tyr Ile Leu Ala Arg  
                   580                                  585                                  590  
 Arg Arg Leu Glu Asp Ser Val Ala Cys Arg Leu Phe Ala Gln Leu Ile  
                   595                                  600                                  605  
 Ser Gly Val Ala Tyr Leu His Ser Arg Gly Val Val His Arg Asp Pro  
                   610                                  615                                  620  
 Tyr Ser Glu Ser Tyr  
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<210> 10  
 <211> 1142

&lt;212&gt; PRT

<213> *Saccharomyces cerevisiae*

&lt;400&gt; 10

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Met Ala Ile Asn Gly Asn Ser Ile Pro Ala Ile Lys Asp Asn Thr Ile
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Gly Pro Trp Lys Leu Gly Glu Thr Leu Gly Leu Gly Ser Thr Gly Lys
          20           25           30

Val Gln Leu Ala Arg Asn Gly Ser Thr Gly Gln Glu Ala Ala Val Lys
          35           40           45

Val Ile Ser Lys Ala Val Phe Asn Thr Gly Asn Val Ser Gly Thr Ser
  50           55           60

Ile Val Gly Ser Thr Thr Pro Asp Ala Leu Pro Tyr Gly Ile Glu Arg
  65           70           75           80

Glu Ile Ile Ile Met Lys Leu Leu Asn His Pro Asn Val Leu Arg Leu
          85           90           95

Tyr Asp Val Trp Glu Thr Asn Thr Asp Leu Tyr Leu Val Leu Glu Tyr
          100          105          110

Ala Glu Lys Gly Glu Leu Phe Asn Leu Leu Val Glu Arg Gly Pro Leu
          115          120          125

Pro Glu His Glu Ala Ile Arg Phe Phe Arg Gln Ile Ile Ile Gly Val
          130          135          140

Ser Tyr Cys His Ala Leu Gly Ile Val His Arg Asp Leu Lys Pro Glu
          145          150          155          160

Asn Leu Leu Leu Asp His Lys Tyr Asn Ile Lys Ile Ala Asp Phe Gly
          165          170          175

Met Ala Ala Leu Glu Thr Glu Gly Lys Leu Leu Glu Thr Ser Cys Gly
          180          185          190

Ser Pro His Tyr Ala Ala Pro Glu Ile Val Ser Gly Ile Pro Tyr Gln
          195          200          205

Gly Phe Ala Ser Asp Val Trp Ser Cys Gly Val Ile Leu Phe Ala Leu
          210          215          220

Leu Thr Gly Arg Leu Pro Phe Asp Glu Glu Asp Gly Asn Ile Arg Thr
          225          230          235          240

Leu Leu Leu Lys Val Gln Lys Gly Glu Phe Glu Met Pro Ser Asp Asp
          245          250          255

Glu Ile Ser Arg Glu Ala Gln Asp Leu Ile Arg Lys Ile Leu Thr Val
          260          265          270

Asp Pro Glu Arg Arg Ile Lys Thr Arg Asp Ile Leu Lys His Pro Leu
          275          280          285

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Leu	Gln	Lys	Tyr	Pro	Ser	Ile	Arg	Asp	Ser	Lys	Ser	Ile	Arg	Gly	Leu	290	295	300
Pro	Arg	Glu	Asp	Thr	Tyr	Leu	Thr	Pro	Leu	Ser	Glu	Ser	Asn	Ser	Ser	305	310	315
Ile	Asp	Ala	Thr	Ile	Leu	Gln	Asn	Leu	Val	Ile	Leu	Trp	His	Gly	Arg	325	330	335
Asp	Pro	Glu	Gly	Ile	Lys	Glu	Lys	Leu	Arg	Glu	Pro	Gly	Ala	Asn	Ala	340	345	350
Glu	Lys	Thr	Leu	Tyr	Ala	Leu	Leu	Tyr	Arg	Phe	Lys	Cys	Asp	Thr	Gln	355	360	365
Lys	Glu	Leu	Ile	Lys	Gln	Gln	Gln	Val	Lys	Lys	Arg	Gln	Ser	Ile	Ser	370	375	380
Ser	Val	Ser	Val	Ser	Pro	Ser	Lys	Lys	Val	Ser	Thr	Thr	Pro	Gln	Arg	385	390	395
Arg	Arg	Asn	Arg	Glu	Ser	Leu	Ile	Ser	Val	Thr	Ser	Ser	Arg	Lys	Lys	405	410	415
Pro	Ile	Ser	Phe	Asn	Lys	Phe	Thr	Ala	Ser	Ser	Ala	Ser	Ser	Ser	Asn	420	425	430
Leu	Thr	Thr	Pro	Gly	Ser	Ser	Lys	Arg	Leu	Ser	Lys	Asn	Phe	Ser	Ser	435	440	445
Lys	Lys	Lys	Leu	Ser	Thr	Ile	Val	Asn	Gln	Ser	Ser	Pro	Thr	Pro	Ala	450	455	460
Ser	Arg	Asn	Lys	Arg	Ala	Ser	Val	Ile	Asn	Val	Glu	Lys	Asn	Gln	Lys	465	470	475
Arg	Ala	Ser	Ile	Phe	Ser	Thr	Thr	Lys	Lys	Asn	Lys	Arg	Ser	Ser	Arg	485	490	495
Ser	Ile	Lys	Arg	Met	Ser	Leu	Ile	Pro	Ser	Met	Lys	Arg	Glu	Ser	Val	500	505	510
Thr	Thr	Lys	Leu	Met	Ser	Thr	Tyr	Ala	Lys	Leu	Ala	Glu	Asp	Asp	Asp	515	520	525
Trp	Glu	Tyr	Ile	Glu	Lys	Glu	Thr	Lys	Arg	Thr	Ser	Ser	Asn	Phe	Ala	530	535	540
Thr	Leu	Ile	Asp	Glu	Ile	Phe	Glu	Tyr	Glu	Lys	Tyr	Glu	Gln	Ile	Arg	545	550	555
Lys	Glu	Lys	Glu	Glu	Leu	Glu	Arg	Lys	Val	Arg	Glu	Ala	Lys	Ala	Arg	565	570	575
Glu	Glu	Leu	Glu	Arg	Arg	Arg	Arg	Lys	Gln	Glu	Glu	Lys	Glu	Arg	Ala	580	585	590

Arg	Lys	Leu	Leu	Glu	Lys	Glu	Asp	Leu	Lys	Arg	Lys	Gln	Glu	Glu	Leu	595	600	605	
Lys	Lys	Gln	Ile	Glu	Ile	Asp	Ile	Ser	Asp	Leu	Glu	Gln	Glu	Leu	Ser	610	615	620	
Lys	His	Lys	Glu	Glu	Lys	Leu	Asp	Gly	Asn	Ile	Arg	Ser	Ile	Ser	Ala	625	630	635	640
Pro	Met	Glu	Asn	Glu	Glu	Lys	Asn	Ile	Asn	His	Leu	Glu	Val	Asp	Ile	645	650	655	
Asp	Asn	Ile	Leu	Arg	Arg	Arg	Asn	Phe	Ser	Leu	Gln	Thr	Arg	Pro	Val	660	665	670	
Ser	Arg	Leu	Asp	Pro	Gly	Ile	Met	Phe	Ser	Ser	Pro	Thr	Glu	Glu	Val	675	680	685	
Ser	Pro	Val	Glu	Pro	Lys	Arg	Thr	Glu	Asn	Glu	Arg	Leu	Thr	Thr	Glu	690	695	700	
Lys	Lys	Ile	Leu	Glu	Thr	Ile	Arg	Arg	Ser	Lys	Phe	Leu	Gly	Ser	Ser	705	710	715	720
Phe	Asn	Ile	Asp	Lys	Glu	Leu	Lys	Leu	Ser	Lys	Met	Glu	Tyr	Pro	Ser	725	730	735	
Ile	Ile	Ala	Pro	Gln	Arg	Leu	Ser	Glu	Glu	Arg	Val	Val	Ser	Asp	Ser	740	745	750	
Asn	Asp	Gly	Tyr	Glu	Ser	Leu	Ile	Leu	Pro	Lys	Asp	Gly	Asn	Gly	Val	755	760	765	
Ser	Gln	Leu	Lys	Asp	Ser	Thr	Ala	Thr	Thr	Ala	Pro	Val	Ser	Asp	Gly	770	775	780	
Arg	Leu	Arg	Lys	Ile	Ser	Glu	Ile	Arg	Val	Pro	Gln	Phe	Thr	Arg	Lys	785	790	795	800
Ser	Arg	His	Phe	Ser	Glu	Ser	Asn	Lys	Arg	Leu	Ser	Val	Leu	Ser	Met	805	810	815	
Tyr	Ser	Thr	Lys	Glu	Ser	Phe	Thr	Asn	Leu	Val	Asp	Ile	Leu	Lys	Asn	820	825	830	
Gly	Asn	Leu	Asp	Val	Asn	Asn	Gln	Gln	Ser	Gln	Arg	Ile	Pro	Thr	Pro	835	840	845	
Arg	Ser	Ala	Asp	Asp	Ser	Glu	Phe	Leu	Phe	Glu	Thr	Val	Asn	Glu	Glu	850	855	860	
Ala	Glu	Tyr	Thr	Gly	Asn	Ser	Ser	Asn	Asp	Glu	Arg	Leu	Tyr	Asp	Val	865	870	875	880
Gly	Asp	Ser	Thr	Ile	Lys	Asp	Lys	Ser	Ala	Leu	Lys	Leu	Asn	Phe	Ala	885	890	895	

Asp Arg Phe Asn Gly Ser Asn Glu Ala Lys Gln Thr Asp Asn Leu His  
 900 905 910  
 Leu Pro Ile Leu Pro Pro Leu Asn Gly Asp Asn Glu Leu Arg Lys Gln  
 915 920 925  
 Asn Ser Gln Glu Gly Asp Gln Ala His Pro Lys Ile Lys Ser Met Ile  
 930 935 940  
 Pro Glu Ser Gly Ser Ser Ser His Thr Glu Lys Glu Glu Glu Asn Glu  
 945 950 955 960  
 Glu Lys Glu Glu Lys Lys Pro Glu Gln His Lys Gln Glu Glu Asp Gln  
 965 970 975  
 Glu Lys Arg Glu Lys Val Val Asp Asp Met Glu Pro Pro Leu Asn Lys  
 980 985 990  
 Ser Val Gln Lys Ile Arg Glu Lys Asn Ala Gly Ser Gln Ala Lys Asp  
 995 1000 1005  
 His Ser Lys Asp His Leu Lys Glu His Lys Gln Asp Lys Asn Thr Ala  
 1010 1015 1020  
 Ile Gly Asn Gly Ser Phe Phe Arg Lys Phe Ser Lys Ser Ser Asp Lys  
 1025 1030 1035 1040  
 Thr Met Glu Leu Tyr Ala Lys Ile Ser Ala Lys Gln Leu Phe Asn Gly  
 1045 1050 1055  
 Leu Glu Lys Leu Leu Arg Gly Trp Thr Gln Tyr Gly Leu Lys Asn Ile  
 1060 1065 1070  
 Lys Ser His Pro Asn Asn Leu Thr Leu Thr Gly Lys Leu Ser Ser Asp  
 1075 1080 1085  
 Asn Ile Phe Ser Leu Arg Ser Thr Leu Phe Glu Val Asn Ile Tyr Pro  
 1090 1095 1100  
 Arg Gly Lys Met Ser Val Val Gln Phe Lys Lys Val Ser Gly Ser Phe  
 1105 1110 1115 1120  
 Lys Ala Val Lys Lys Leu Val Asn Glu Val Glu Asn Val Leu Asn Lys  
 1125 1130 1135  
 Glu Gly Val Leu Gln Lys  
 1140

&lt;210&gt; 11

&lt;211&gt; 1518

&lt;212&gt; PRT

<213> *Saccharomyces cerevisiae*

&lt;400&gt; 11

Met Thr Gly His Val Ser Lys Thr Ser His Val Pro Lys Gly Arg Pro  
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Ser Ser Leu Ala Lys Lys Ala Ala Lys Arg Ala Met Ala Lys Val Asn  
 20 25 30  
 Ser Asn Pro Lys Arg Ala Ser Gly His Leu Glu Arg Val Val Gln Ser  
 35 40 45  
 Val Asn Asp Ala Thr Lys Arg Leu Ser Gln Pro Asp Ser Thr Val Ser  
 50 55 60  
 Val Ala Thr Lys Ser Ser Lys Arg Lys Ser Arg Asp Thr Val Gly Pro  
 65 70 75 80  
 Trp Lys Leu Gly Lys Thr Leu Gly Lys Gly Ser Ser Gly Arg Val Arg  
 85 90 95  
 Leu Ala Lys Asn Met Glu Thr Gly Gln Leu Ala Ala Ile Lys Ile Val  
 100 105 110  
 Pro Lys Lys Lys Ala Phe Val His Cys Ser Asn Asn Gly Thr Val Pro  
 115 120 125  
 Asn Ser Tyr Ser Ser Ser Met Val Thr Ser Asn Val Ser Ser Pro Ser  
 130 135 140  
 Ile Ala Ser Arg Glu His Ser Asn His Ser Gln Thr Asn Pro Tyr Gly  
 145 150 155 160  
 Ile Glu Arg Glu Ile Val Ile Met Lys Leu Ile Ser His Thr Asn Val  
 165 170 175  
 Met Ala Leu Phe Glu Val Trp Glu Asn Lys Ser Glu Leu Tyr Leu Val  
 180 185 190  
 Leu Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Tyr Leu Val Ser Lys  
 195 200 205  
 Gly Lys Leu Pro Glu Arg Glu Ala Ile His Tyr Phe Lys Gln Ile Val  
 210 215 220  
 Glu Gly Val Ser Tyr Cys His Ser Phe Asn Ile Cys His Arg Asp Leu  
 225 230 235 240  
 Lys Pro Glu Asn Leu Leu Leu Asp Lys Lys Asn Arg Arg Ile Lys Ile  
 245 250 255  
 Ala Asp Phe Gly Met Ala Ala Leu Glu Leu Pro Asn Lys Leu Leu Lys  
 260 265 270  
 Thr Ser Cys Gly Ser Pro His Tyr Ala Ser Pro Glu Ile Val Met Gly  
 275 280 285  
 Arg Pro Tyr His Gly Gly Pro Ser Asp Val Trp Ser Cys Gly Ile Val  
 290 295 300  
 Leu Phe Ala Leu Leu Thr Gly His Leu Pro Phe Asn Asp Asp Asn Ile  
 305 310 315 320

Lys Lys Leu Leu Leu Lys Val Gln Ser Gly Lys Tyr Gln Met Pro Ser  
 325 330 335  
 Asn Leu Ser Ser Glu Ala Arg Asp Leu Ile Ser Lys Ile Leu Val Ile  
 340 345 350  
 Asp Pro Glu Lys Arg Ile Thr Thr Gln Glu Ile Leu Lys His Pro Leu  
 355 360 365  
 Ile Lys Lys Tyr Asp Asp Leu Pro Val Asn Lys Val Leu Arg Lys Met  
 370 375 380  
 Arg Lys Asp Asn Met Ala Arg Gly Lys Ser Asn Ser Asp Leu His Leu  
 385 390 395 400  
 Leu Asn Asn Val Ser Pro Ser Ile Val Thr Leu His Ser Lys Gly Glu  
 405 410 415  
 Ile Asp Glu Ser Ile Leu Arg Ser Leu Gln Ile Leu Trp His Gly Val  
 420 425 430  
 Ser Arg Glu Leu Ile Thr Ala Lys Leu Leu Gln Lys Pro Met Ser Glu  
 435 440 445  
 Glu Lys Leu Phe Tyr Ser Leu Leu Leu Gln Tyr Lys Gln Arg His Ser  
 450 455 460  
 Ile Ser Leu Ser Ser Ser Ser Glu Asn Lys Lys Ser Ala Thr Glu Ser  
 465 470 475 480  
 Ser Val Asn Glu Pro Arg Ile Glu Tyr Ala Ser Lys Thr Ala Asn Asn  
 485 490 495  
 Thr Gly Leu Arg Ser Glu Asn Asn Asp Val Lys Thr Leu His Ser Leu  
 500 505 510  
 Glu Ile His Ser Glu Asp Thr Ser Thr Val Asn Gln Asn Asn Ala Ile  
 515 520 525  
 Thr Gly Val Asn Thr Glu Ile Asn Ala Pro Val Leu Ala Gln Lys Ser  
 530 535 540  
 Gln Phe Ser Ile Asn Thr Leu Ser Gln Pro Glu Ser Asp Lys Ala Glu  
 545 550 555 560  
 Ala Glu Ala Val Thr Leu Pro Pro Ala Ile Pro Ile Phe Asn Ala Ser  
 565 570 575  
 Ser Ser Arg Ile Phe Arg Asn Ser Tyr Thr Ser Ile Ser Ser Arg Ser  
 580 585 590  
 Arg Arg Ser Leu Arg Leu Ser Asn Ser Arg Leu Ser Leu Ser Ala Ser  
 595 600 605  
 Thr Ser Arg Glu Thr Val His Asp Asn Glu Met Pro Leu Pro Gln Leu  
 610 615 620

Pro	Lys	Ser	Pro	Ser	Arg	Tyr	Ser	Leu	Ser	Arg	Arg	Ala	Ile	His	Ala	
625					630					635					640	
Ser	Pro	Ser	Thr	Lys	Ser	Ile	His	Lys	Ser	Leu	Ser	Arg	Lys	Asn	Ile	
				645					650					655		
Ala	Ala	Thr	Val	Ala	Ala	Arg	Arg	Thr	Leu	Gln	Asn	Ser	Ala	Ser	Lys	
			660					665					670			
Arg	Ser	Leu	Tyr	Ser	Leu	Gln	Ser	Ile	Ser	Lys	Arg	Ser	Leu	Asn	Leu	
		675					680					685				
Asn	Asp	Leu	Leu	Val	Phe	Asp	Asp	Pro	Leu	Pro	Ser	Lys	Lys	Pro	Ala	
	690					695					700					
Ser	Glu	Asn	Val	Asn	Lys	Ser	Glu	Pro	His	Ser	Leu	Glu	Ser	Asp	Ser	
705					710					715					720	
Asp	Phe	Glu	Ile	Leu	Cys	Asp	Gln	Ile	Leu	Phe	Gly	Asn	Ala	Leu	Asp	
				725					730					735		
Arg	Ile	Leu	Glu	Glu	Glu	Glu	Asp	Asn	Glu	Lys	Glu	Arg	Asp	Thr	Gln	
			740					745						750		
Arg	Gln	Arg	Gln	Asn	Asp	Thr	Lys	Ser	Ser	Ala	Asp	Thr	Phe	Thr	Ile	
			755				760					765				
Ser	Gly	Val	Ser	Thr	Asn	Lys	Glu	Asn	Glu	Gly	Pro	Glu	Tyr	Pro	Thr	
	770					775					780					
Lys	Ile	Glu	Lys	Asn	Gln	Phe	Asn	Met	Ser	Tyr	Lys	Pro	Ser	Glu	Asn	
785					790					795					800	
Met	Ser	Gly	Leu	Ser	Ser	Phe	Pro	Ile	Phe	Glu	Lys	Glu	Asn	Thr	Leu	
				805					810					815		
Ser	Ser	Ser	Tyr	Leu	Glu	Glu	Gln	Lys	Pro	Lys	Arg	Ala	Ala	Leu	Ser	
			820					825					830			
Asp	Ile	Thr	Asn	Ser	Phe	Asn	Lys	Met	Asn	Lys	Gln	Glu	Gly	Met	Arg	
			835				840					845				
Ile	Glu	Lys	Lys	Ile	Gln	Arg	Glu	Gln	Leu	Gln	Lys	Lys	Asn	Asp	Arg	
	850					855					860					
Pro	Ser	Pro	Leu	Lys	Pro	Ile	Gln	His	Gln	Glu	Leu	Arg	Val	Asn	Ser	
865					870					875					880	
Leu	Pro	Asn	Asp	Gln	Gly	Lys	Pro	Ser	Leu	Ser	Leu	Asp	Pro	Arg	Arg	
				885					890					895		
Asn	Ile	Ser	Gln	Pro	Val	Asn	Ser	Lys	Val	Glu	Ser	Leu	Leu	Gln	Gly	
			900					905					910			
Leu	Lys	Phe	Lys	Lys	Glu	Pro	Ala	Ser	His	Trp	Thr	His	Glu	Arg	Gly	
		915					920					925				

Ser Leu Phe Met Ser Glu His Val Glu Asp Glu Lys Pro Val Lys Ala  
 930 935 940  
 Ser Asp Val Ser Ile Glu Ser Ser Tyr Val Pro Leu Thr Thr Val Ala  
 945 950 955 960  
 Thr Ser Ser Arg Asp Pro Ser Val Leu Ala Glu Ser Ser Thr Ile Gln  
 965 970 975  
 Lys Pro Met Leu Ser Leu Pro Ser Ser Phe Leu Asn Thr Ser Met Thr  
 980 985 990  
 Phe Lys Asn Leu Ser Gln Ile Leu Ala Asp Asp Gly Asp Asp Lys His  
 995 1000 1005  
 Leu Ser Val Pro Gln Asn Gln Ser Arg Ser Val Ala Met Ser His Pro  
 1010 1015 1020  
 Leu Arg Lys Gln Ser Ala Lys Ile Ser Leu Thr Pro Arg Ser Asn Leu  
 1025 1030 1035 1040  
 Asn Ala Asn Leu Ser Val Lys Arg Asn Gln Gly Ser Pro Gly Ser Tyr  
 1045 1050 1055  
 Leu Ser Asn Asp Leu Asp Gly Ile Ser Asp Met Thr Phe Ala Met Glu  
 1060 1065 1070  
 Ile Pro Thr Asn Thr Phe Thr Ala Gln Ala Ile Gln Leu Met Asn Asn  
 1075 1080 1085  
 Asp Thr Asp Asn Asn Lys Ile Asn Thr Ser Pro Lys Ala Ser Ser Phe  
 1090 1095 1100  
 Thr Lys Glu Lys Val Ile Lys Ser Ala Ala Tyr Ile Ser Lys Glu Lys  
 1105 1110 1115 1120  
 Glu Pro Asp Asn Ser Asp Thr Asn Tyr Ile Pro Asp Tyr Thr Ile Pro  
 1125 1130 1135  
 Asn Thr Tyr Asp Glu Lys Ala Ile Asn Ile Phe Glu Asp Ala Pro Ser  
 1140 1145 1150  
 Asp Glu Gly Ser Leu Asn Thr Ser Ser Ser Glu Ser Asp Ser Arg Ala  
 1155 1160 1165  
 Ser Val His Arg Lys Ala Val Ser Ile Asp Thr Met Ala Thr Thr Asn  
 1170 1175 1180  
 Val Leu Thr Pro Ala Thr Asn Val Arg Val Ser Leu Tyr Trp Asn Asn  
 1185 1190 1195 1200  
 Asn Ser Ser Gly Ile Pro Arg Glu Thr Thr Glu Glu Ile Leu Ser Lys  
 1205 1210 1215  
 Leu Arg Leu Ser Pro Glu Asn Pro Ser Asn Thr His Met Gln Lys Arg  
 1220 1225 1230

Phe Ser Ser Thr Arg Gly Ser Arg Asp Ser Asn Ala Leu Gly Ile Ser  
 1235 1240 1245  
 Gln Ser Leu Gln Ser Met Phe Lys Asp Leu Glu Glu Asp Gln Asp Gly  
 1250 1255 1260  
 His Thr Ser Gln Ala Asp Ile Leu Glu Ser Ser Met Ser Tyr Ser Lys  
 1265 1270 1275 1280  
 Arg Arg Pro Ser Glu Glu Ser Val Asn Pro Lys Gln Arg Val Thr Met  
 1285 1290 1295  
 Leu Phe Asp Glu Glu Glu Glu Glu Ser Lys Lys Val Gly Gly Gly Lys  
 1300 1305 1310  
 Ile Lys Glu Glu His Thr Lys Leu Asp Asn Lys Ile Ser Glu Glu Ser  
 1315 1320 1325  
 Ser Gln Leu Val Leu Pro Val Val Glu Lys Lys Glu Asn Ala Asn Asn  
 1330 1335 1340  
 Thr Glu Asn Asn Tyr Ser Lys Ile Pro Lys Pro Ser Thr Ile Lys Val  
 1345 1350 1355 1360  
 Thr Lys Asp Thr Ala Met Glu Ser Asn Thr Gln Thr His Thr Lys Lys  
 1365 1370 1375  
 Pro Ile Leu Lys Ser Val Gln Asn Val Glu Val Glu Glu Ala Pro Ser  
 1380 1385 1390  
 Ser Asp Lys Lys Asn Trp Phe Val Lys Leu Phe Gln Asn Phe Ser Ser  
 1395 1400 1405  
 His Asn Asn Ala Thr Lys Ala Ser Lys Asn His Val Thr Asn Ile Ser  
 1410 1415 1420  
 Phe Asp Asp Ala His Met Leu Thr Leu Asn Glu Phe Asn Lys Asn Ser  
 1425 1430 1435 1440  
 Ile Asp Tyr Gln Leu Lys Asn Leu Asp His Lys Phe Gly Arg Lys Val  
 1445 1450 1455  
 Val Glu Tyr Asp Cys Lys Phe Val Lys Gly Asn Phe Lys Phe Lys Ile  
 1460 1465 1470  
 Lys Ile Thr Ser Thr Pro Asn Ala Ser Ser Val Ile Thr Val Lys Lys  
 1475 1480 1485  
 Arg Ser Lys His Ser Asn Thr Ser Ser Asn Lys Ala Phe Glu Lys Phe  
 1490 1495 1500  
 Asn Asp Asp Val Glu Arg Val Ile Arg Asn Ala Gly Arg Ser  
 1505 1510 1515

&lt;210&gt; 12

&lt;211&gt; 1037

&lt;212&gt; PRT

<213> *Saccharomyces cerevisiae*

&lt;400&gt; 12

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Met Thr Val Ala Asn Thr Glu Thr His Ser Ala Ala Lys Pro Ser Ser
 1           5           10           15

Thr Ile Gly Pro Trp Lys Leu Gly Glu Thr Leu Gly Phe Gly Ser Thr
          20           25           30

Gly Lys Val Gln Leu Ala Gln His Glu Arg Thr Gly His Arg Thr Ala
          35           40           45

Val Lys Val Ile Ser Lys Ser Ile Phe Asn Asn Asn Gly Asn His Ser
 50           55           60

Asn Asp Asp Ser Val Leu Pro Tyr Asn Ile Glu Arg Glu Ile Val Ile
 65           70           75           80

Met Lys Leu Leu Ser His Pro Asn Val Leu Ser Leu Tyr Asp Val Trp
          85           90           95

Glu Thr Asn Asn Asn Leu Tyr Leu Ile Leu Glu Tyr Ala Glu Lys Gly
          100          105          110

Glu Leu Phe Asn Leu Leu Val Asp His Gly Pro Leu Pro Glu Arg Glu
          115          120          125

Ala Ile Asn Cys Phe Arg Gln Ile Ile Ile Gly Ile Ser Tyr Cys His
          130          135          140

Ala Leu Gly Ile Val His Arg Asp Leu Lys Pro Glu Asn Leu Leu Leu
          145          150          155          160

Asp Ser Phe Tyr Asn Ile Lys Ile Ala Asp Phe Gly Met Ala Ala Leu
          165          170          175

Gln Thr Asp Ala Asp Leu Leu Glu Thr Ser Cys Gly Ser Pro His Tyr
          180          185          190

Ala Ala Pro Glu Ile Val Ser Gly Leu Pro Tyr Glu Gly Phe Ala Ser
          195          200          205

Asp Val Trp Ser Cys Gly Val Ile Leu Phe Ala Leu Leu Thr Gly Arg
          210          215          220

Leu Pro Phe Asp Glu Glu Asn Gly Asn Val Arg Asp Leu Leu Leu Lys
          225          230          235          240

Val Gln Lys Gly Gln Phe Glu Met Pro Asn Asp Thr Glu Ile Ser Arg
          245          250          255

Asp Ala Gln Asp Leu Ile Gly Lys Ile Leu Val Val Asp Pro Arg Gln
          260          265          270

Arg Ile Lys Ile Arg Asp Ile Leu Ser His Pro Leu Leu Lys Lys Tyr
          275          280          285

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Gln	Thr	Ile	Lys	Asp	Ser	Lys	Ser	Ile	Lys	Asp	Leu	Pro	Arg	Glu	Asn	290	295	300
Thr	Tyr	Leu	Tyr	Pro	Leu	Ala	Asp	Ser	Asn	Asn	His	Thr	Ser	Ala	Ser	305	310	315
Ile	Asp	Asp	Ser	Ile	Leu	Gln	Asn	Leu	Val	Val	Leu	Trp	His	Gly	Arg	325	330	335
His	Ala	Asp	Asp	Ile	Val	Ser	Lys	Leu	Lys	Glu	Asn	Gly	Thr	Asn	Lys	340	345	350
Glu	Lys	Ile	Leu	Tyr	Ala	Leu	Leu	Tyr	Arg	Phe	Lys	Leu	Asp	Ser	Val	355	360	365
Arg	Gly	Ser	Asn	Lys	Lys	Asn	Arg	Asn	Lys	Ile	Lys	Lys	Thr	Lys	Lys	370	375	380
Asn	Lys	Arg	Ser	Ser	Thr	Leu	Ser	Ser	Ser	Ser	Ser	Leu	Leu	Leu	Asn	385	390	395
Asn	Arg	Ser	Ile	Gln	Ser	Thr	Pro	Arg	Arg	Arg	Thr	Ser	Lys	Arg	His	405	410	415
Ser	Arg	Glu	Phe	Ser	Ser	Ser	Arg	Lys	Arg	Ser	Ser	Phe	Leu	Leu	Ser	420	425	430
Ser	Asn	Pro	Thr	Asp	Ser	Ser	Pro	Ile	Pro	Leu	Arg	Ser	Ser	Lys	Arg	435	440	445
Ile	Thr	His	Ile	Asn	Val	Ala	Ser	Ala	Asn	Thr	Gln	Ala	Thr	Pro	Ser	450	455	460
Gly	Val	Pro	Asn	Pro	His	Lys	Arg	Asn	Ser	Lys	Lys	Arg	Ser	Ser	Lys	465	470	475
Arg	Leu	Ser	Tyr	Met	Pro	Asn	Thr	Lys	Arg	Ser	Ser	Leu	Thr	Ser	Lys	485	490	495
Ser	Leu	Ser	Asn	Phe	Thr	Asn	Leu	Ile	Asp	Asp	Asp	Asp	Trp	Glu	Tyr	500	505	510
Ile	Glu	Lys	Asp	Ala	Lys	Arg	Thr	Ser	Ser	Asn	Phe	Ala	Thr	Leu	Ile	515	520	525
Asp	Glu	Ile	Phe	Glu	Pro	Glu	Lys	Phe	Glu	Leu	Ala	Lys	Arg	Glu	Lys	530	535	540
Ala	Glu	Leu	Gln	Arg	Lys	Val	Gln	Glu	Ala	Lys	Arg	Gln	Ser	Val	Asn	545	550	555
Ala	Gln	Lys	Ile	Asn	Glu	Asp	Glu	Phe	Gly	Ser	Glu	Val	Ser	Asp	Gly	565	570	575
Met	Lys	Glu	Leu	Lys	Lys	Ile	Asn	Asp	Lys	Val	Ser	Ser	Pro	Leu	Ile	580	585	590

Asn	Tyr	Glu	Phe	Ser	Gln	Gln	Glu	Leu	Leu	Gln	Asp	Ile	Asp	Thr	Leu	595	600	605
Leu	Thr	Asn	Arg	Tyr	Gln	Leu	Ser	Ser	Tyr	Thr	Arg	Pro	Ile	Ser	Arg	610	615	620
Leu	Asp	Pro	Gly	Leu	Thr	Pro	Val	Thr	Glu	Thr	Leu	Pro	Asn	Asn	Leu	625	630	635
Lys	Glu	Lys	Thr	Ala	Leu	Leu	Gln	Asp	Thr	Glu	Lys	Lys	Ile	Ile	Glu	645	650	655
Thr	Ile	Arg	Arg	Ser	Lys	Phe	Leu	Gly	Ser	Leu	Leu	Asn	Val	Arg	Gly	660	665	670
Gly	Leu	Ser	Pro	Gly	Lys	Ser	Glu	Leu	Ala	Pro	Ile	Glu	Glu	Ser	Pro	675	680	685
Ile	Val	Ser	Thr	Thr	Pro	Leu	Ile	Tyr	Asn	Asp	Arg	Met	Glu	Pro	Arg	690	695	700
Arg	Ile	Ser	Asp	Val	Glu	Val	Pro	His	Phe	Thr	Arg	Lys	Ser	Lys	His	705	710	715
Phe	Thr	Thr	Ala	Asn	Asn	Arg	Arg	Ser	Val	Leu	Ser	Leu	Tyr	Ala	Lys	725	730	735
Asp	Ser	Ile	Lys	Asp	Leu	Asn	Glu	Phe	Leu	Ile	Lys	Glu	Asp	Pro	Asp	740	745	750
Leu	Pro	Pro	Gln	Gly	Ser	Thr	Asp	Asn	Glu	Ser	Arg	Ser	Glu	Asp	Pro	755	760	765
Glu	Ile	Ala	Glu	Ser	Ile	Thr	Asp	Ser	Arg	Asn	Ile	Gln	Tyr	Asp	Glu	770	775	780
Asp	Asp	Ser	Lys	Asp	Gly	Asp	Asn	Val	Asn	Asn	Asp	Asn	Ile	Leu	Ser	785	790	795
Asp	Phe	Pro	Gln	Gly	Val	Gly	Ile	Ser	Gln	Glu	Tyr	Asp	Met	Lys	Asp	805	810	815
Lys	Asn	Pro	Asn	Gln	Ser	Pro	Ile	Ser	Lys	Ser	Ala	Glu	Pro	Thr	Leu	820	825	830
Val	Val	Lys	Leu	Pro	Ser	Leu	Ser	Ser	Phe	Gln	Gly	Lys	Asn	Ala	Ser	835	840	845
Gly	Leu	Gly	Leu	Tyr	Gln	Arg	Glu	Pro	Ser	Lys	Val	Thr	Leu	Pro	Ser	850	855	860
Leu	Thr	Ser	Asn	Asn	Ser	Ser	Val	Gly	Glu	Asn	Ile	Glu	Asp	Gly	Ala	865	870	875
Glu	Lys	Gly	Thr	Glu	Ser	Glu	Lys	Ile	Ala	Ala	Ser	Leu	Ser	Asp	Asp	885	890	895



Asp Leu Lys Glu Asp Asn Asp Lys Lys Asp Asn Asp Thr Val Asn Ala  
 900 905 910  
 Pro Thr Thr Val Lys Lys Pro Pro Asn Ser Val Leu Leu Lys Lys Phe  
 915 920 925  
 Ser Lys Gly Lys Ile Leu Glu Leu Glu Ile His Ala Lys Ile Pro Glu  
 930 935 940  
 Lys Arg Leu Tyr Glu Gly Leu His Lys Leu Leu Glu Gly Trp Lys Gln  
 945 950 955 960  
 Tyr Gly Leu Lys Asn Leu Val Phe Asn Ile Thr Asn Met Ile Ile Thr  
 965 970 975  
 Gly Lys Leu Val Asn Asp Ser Ile Leu Phe Leu Arg Ser Thr Leu Phe  
 980 985 990  
 Glu Ile Met Val Leu Pro Asn Gly Asp Gly Arg Ser Leu Ile Lys Phe  
 995 1000 1005  
 Asn Lys Lys Thr Gly Ser Thr Lys Thr Leu Thr Lys Leu Ala Thr Glu  
 1010 1015 1020  
 Ile Gln Ile Ile Leu Gln Lys Glu Gly Val Leu Asp Lys  
 1025 1030 1035

&lt;210&gt; 13

&lt;211&gt; 775

&lt;212&gt; PRT

&lt;213&gt; Schizosaccharomyces pombe

&lt;400&gt; 13

Met Ser Thr Ile Ser Glu Val Gly Pro Trp Glu Leu Gly Leu Ser Leu  
 1 5 10 15  
 Gly Ser Gly Gly Pro Asn Ser Ser Arg Leu Ala Lys His Arg Glu Thr  
 20 25 30  
 Gly Gln Leu Ala Val Val Lys Pro Ile Val Gly Trp Ser Glu Leu Thr  
 35 40 45  
 Ser Ser Gln Gln Ala Arg Ile Glu Gly Glu Leu Val Leu Leu Arg Leu  
 50 55 60  
 Ile Glu His Pro Asn Val Leu Gln Leu Ile Asp Val Ile Ser Ala Gln  
 65 70 75 80  
 Glu Gln Leu Phe Val Val Val Glu Tyr Met Pro Gly Gly Glu Leu Phe  
 85 90 95  
 Asp Cys Met Leu Arg Lys Gly Ser Phe Thr Glu Gln Asp Thr Ala Lys  
 100 105 110  
 Phe Leu Trp Gln Ile Leu Cys Gly Leu Glu Tyr Cys His Lys Leu His  
 115 120 125

Ile	Cys	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Leu	Tyr	Leu	Asp	Ala	His	130	135	140
Gly	Ser	Ile	Lys	Ile	Gly	Glu	Phe	Gly	Met	Ala	Ser	Ile	Gln	Gln	Pro	145	150	155
Gly	Lys	Leu	Leu	Gln	Thr	Ser	Cys	Gly	Ser	Pro	His	Tyr	Ala	Ser	Pro	165	170	175
Glu	Ile	Ile	Met	Gly	Arg	Ser	Tyr	Asp	Gly	Cys	Ala	Ser	Asp	Ile	Trp	180	185	190
Ser	Cys	Gly	Ile	Ile	Phe	Phe	Ala	Leu	Leu	Thr	Gly	Lys	Leu	Pro	Phe	195	200	205
Asp	Asp	Asp	Asn	Ile	Arg	Ser	Leu	Leu	Leu	Lys	Val	Cys	Gln	Gly	Gln	210	215	220
Phe	Glu	Met	Pro	Ser	Asn	Ile	Ser	Pro	Gln	Ala	Gln	His	Leu	Leu	Tyr	225	230	235
Arg	Met	Leu	Asp	Val	Asp	Ser	Ser	Thr	Arg	Ile	Thr	Met	Glu	Gln	Ile	245	250	255
Arg	Glu	His	Pro	Phe	Leu	Ser	Cys	Phe	Val	His	Pro	Asn	Ile	Ser	Ile	260	265	270
Pro	Ile	Ile	Ser	Ala	Pro	Ile	Gln	Pro	Ile	Asp	Pro	Leu	Ile	Val	Gln	275	280	285
His	Leu	Ser	Leu	Val	Phe	Arg	Cys	Ser	Asp	Asp	Pro	Met	Pro	Leu	Tyr	290	295	300
Glu	Lys	Leu	Ala	Ser	Gln	Ser	Pro	Leu	Val	Glu	Lys	Thr	Leu	Tyr	Thr	305	310	315
Leu	Leu	Ser	Arg	His	Leu	His	Pro	Pro	Ser	Ser	Ala	Ala	Val	Asp	Arg	325	330	335
Asn	Arg	Ala	Val	Val	Asp	Asp	Leu	Leu	Gly	Thr	Ala	Ala	Ser	Asn	Gly	340	345	350
Gln	Gln	Met	Asp	Glu	Glu	Glu	Ile	Glu	Gln	Ala	Ile	Asn	Ile	Pro	Thr	355	360	365
Leu	Ala	Pro	Tyr	Pro	Ile	Ser	Tyr	Ala	Ala	Glu	Ser	Val	Pro	Arg	Pro	370	375	380
Ala	Thr	Ser	Ala	Ser	Pro	Phe	Leu	Thr	Pro	Val	Thr	Thr	Ser	Gly	Thr	385	390	395
Phe	Asn	Tyr	Ser	Phe	Asn	Ala	Thr	Asn	Pro	Gln	Ser	Ile	Leu	Gln	Arg	405	410	415
Pro	Ala	Thr	Thr	Ser	Ser	Ala	Val	Pro	Gln	Leu	Pro	Lys	Ser	Val	Thr	420	425	430

Pro	Gly	Leu	Ala	Tyr	Pro	His	Asp	Ser	Ser	Met	Leu	Ser	Ser	Asn	Tyr
		435					440					445			
Arg	Pro	Pro	Ser	Ala	Leu	Ser	Pro	Arg	Asn	Phe	Asn	Val	Ser	Ile	Asn
	450					455					460				
Asp	Pro	Glu	Val	Gln	Leu	Ser	Arg	Arg	Ala	Thr	Ser	Leu	Asp	Met	Ser
465					470					475					480
Asn	Asp	Phe	Arg	Met	Asn	Glu	Asn	Asp	Pro	Ser	Ile	Val	Gly	Asn	Leu
				485					490					495	
Ala	Ala	Ser	Asn	Phe	Pro	Thr	Gly	Met	Gly	Pro	Pro	Arg	Lys	Arg	Val
			500					505					510		
Thr	Ser	Arg	Met	Ser	Glu	His	Thr	Gly	Asn	Arg	Val	Val	Ser	Phe	Pro
		515					520					525			
Arg	Gly	Ser	Ala	Phe	Asn	Pro	Arg	Val	Thr	Arg	Phe	Asn	Val	Gly	Asn
	530					535					540				
Glu	Gln	Phe	Ser	Asn	Asn	Ile	Asp	Asn	Asn	Asn	Tyr	Asn	Gln	Pro	Tyr
545					550					555					560
Ala	Asn	Ala	Thr	Met	Asn	Asn	Ser	Arg	Arg	Leu	Arg	Thr	Pro	Ser	Gly
				565					570					575	
Glu	Arg	Ser	Met	Arg	Ala	Asp	Leu	Ser	Gln	Ser	Pro	Ala	Ser	Tyr	Asp
			580					585					590		
Ser	Leu	Asn	Val	Pro	Lys	His	Arg	Arg	Arg	Gln	Ser	Leu	Phe	Ser	Pro
		595					600					605			
Ser	Ser	Thr	Lys	Lys	Lys	Leu	Ser	Gly	Ser	Pro	Phe	Gln	Pro	Lys	Arg
	610					615					620				
Ser	Phe	Leu	Arg	Arg	Leu	Phe	Ser	Ser	Glu	Pro	Ser	Cys	Lys	Cys	Val
625					630					635					640
Tyr	Ala	Ser	Leu	Val	Ala	Ser	Glu	Leu	Glu	His	Glu	Ile	Leu	Glu	Val
				645					650					655	
Leu	Arg	Arg	Trp	Gln	Leu	Leu	Gly	Ile	Gly	Ile	Ala	Asp	Ile	Ile	Tyr
			660					665					670		
Asp	Ser	Val	Ser	Ala	Ser	Ile	Ser	Ala	Arg	Ile	Lys	Arg	Gln	Asn	Ser
		675					680					685			
Leu	Asn	Leu	Lys	Pro	Val	Arg	Phe	Arg	Ile	Ser	Val	Leu	Ala	Glu	Phe
	690					695					700				
Phe	Gly	Ser	Gln	Ala	Val	Phe	Val	Leu	Glu	Ser	Gly	Ser	Ser	Thr	Thr
705					710					715					720
Phe	Asp	His	Leu	Ala	Thr	Glu	Phe	Gln	Leu	Ile	Phe	Glu	Asp	Lys	Gly
				725					730					735	

Phe Leu Asp Asn Leu Glu Leu Ser Tyr Phe Gln Ala Ser Ala Ser Arg  
                   740                  745                  750  
 Pro Val Ser Arg Met Ser Val Ser Ser Ser Pro Phe Ala Val Phe Arg  
                   755                  760                  765  
 Gln Arg Gln Ser Val Gln Ser  
           770                  775

<210> 14  
 <211> 593  
 <212> PRT  
 <213> Schizosaccharomyces pombe

<400> 14  
 Met Val Lys Arg His Lys Asn Thr Ile Gly Val Trp Arg Leu Gly Lys  
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 Thr Leu Gly Thr Gly Ser Thr Ser Cys Val Arg Leu Ala Lys His Ala  
                   20                  25                  30  
 Lys Thr Gly Asp Leu Ala Ala Ile Lys Ile Ile Pro Ile Arg Tyr Ala  
                   35                  40                  45  
 Ser Ile Gly Met Glu Ile Leu Met Met Arg Leu Leu Arg His Pro Asn  
   50                  55                  60  
 Ile Leu Arg Leu Tyr Asp Val Trp Thr Asp His Gln His Met Tyr Leu  
   65                  70                  75                  80  
 Ala Leu Glu Tyr Val Pro Asp Gly Glu Leu Phe His Tyr Ile Arg Lys  
                   85                  90                  95  
 His Gly Pro Leu Ser Glu Arg Glu Ala Ala His Tyr Leu Ser Gln Ile  
                   100                  105                  110  
 Leu Asp Ala Val Ala His Cys His Arg Phe Arg Phe Arg His Arg Asp  
                   115                  120                  125  
 Leu Lys Leu Glu Asn Ile Leu Ile Lys Val Asn Glu Gln Gln Ile Lys  
   130                  135                  140  
 Ile Ala Asp Phe Gly Met Ala Thr Val Glu Pro Asn Asp Ser Cys Leu  
   145                  150                  155                  160  
 Glu Asn Tyr Cys Gly Ser Leu His Tyr Leu Ala Pro Glu Ile Val Ser  
                   165                  170                  175  
 His Lys Pro Tyr Arg Gly Ala Pro Ala Asp Val Trp Ser Cys Gly Val  
                   180                  185                  190  
 Ile Leu Tyr Ser Leu Leu Ser Asn Lys Leu Pro Phe Gly Gly Gln Asn  
                   195                  200                  205  
 Thr Asp Val Ile Tyr Asn Lys Ile Arg His Gly Ala Tyr Asp Leu Pro  
   210                  215                  220

Ser	Ser	Ile	Ser	Ser	Ala	Ala	Gln	Asp	Leu	Leu	His	Arg	Met	Leu	Asp	225	230	235	240
Val	Asn	Pro	Ser	Thr	Arg	Ile	Thr	Ile	Pro	Glu	Val	Phe	Ser	His	Pro	245	250	255	
Phe	Leu	Met	Gly	Cys	Thr	Ser	Leu	Ser	Ser	Met	Asp	Ser	Thr	Thr	Pro	260	265	270	
Pro	Thr	Pro	Ser	Leu	Ser	Ile	Asp	Glu	Ile	Asp	Pro	Leu	Val	Val	Asp	275	280	285	
Cys	Met	Cys	Val	Leu	Trp	Lys	Lys	Ser	Ser	Ser	Lys	Lys	Val	Val	Arg	290	295	300	
Arg	Leu	Gln	Gln	Arg	Asp	Asp	Asn	Asp	Glu	Lys	Tyr	Val	Tyr	Lys	Val	305	310	315	320
Leu	Ser	Glu	Ile	Leu	Arg	Asp	Asp	Met	Leu	Lys	Lys	Gln	Arg	Phe	Asp	325	330	335	
Glu	Asn	Lys	Tyr	Leu	Ser	Leu	Tyr	Asp	Leu	Ile	His	Asp	Asn	Asn	Leu	340	345	350	
Phe	Thr	Lys	Ala	Ser	Ile	Ser	Thr	Thr	Ser	Leu	Val	Lys	Ser	Asn	Val	355	360	365	
Ser	Thr	Asn	Ser	Arg	Lys	Ser	Ser	Asn	Phe	Glu	Asp	Glu	Leu	Ala	Arg	370	375	380	
Arg	Val	Ser	Ser	Pro	Leu	Ser	Ala	Leu	Asn	Gln	Met	Ser	Gln	Ser	Pro	385	390	395	400
Ile	Pro	Ile	Arg	Val	Ser	Ser	Asp	Lys	Asp	Tyr	Asp	Ser	Tyr	Ala	Cys	405	410	415	
His	Glu	Val	Val	Ser	Asn	Pro	Ser	Thr	Leu	Asp	Asp	Asp	Tyr	Asn	Tyr	420	425	430	
Met	Phe	Val	Cys	Pro	Pro	Glu	Glu	Tyr	Thr	Tyr	Ser	Thr	Asp	Asn	Val	435	440	445	
Arg	Thr	Asp	Ser	Leu	Asp	Leu	Gln	Ser	Leu	Pro	Thr	Pro	Thr	Leu	Glu	450	455	460	
Gln	Leu	Glu	Ser	Val	Pro	Phe	Asn	Arg	Tyr	Gly	Tyr	Val	Arg	Ile	Phe	465	470	475	480
Pro	Ser	Thr	Thr	Leu	Ser	Ser	Thr	Ala	Ser	Gly	Tyr	Tyr	Thr	Pro	Asp	485	490	495	
Ser	Leu	Ser	Thr	Pro	Glu	Pro	Ser	Ile	Asp	Gly	Leu	Thr	Asn	Leu	Asp	500	505	510	
Asp	Val	Gln	Val	Gly	Gly	Phe	Val	Gln	Gly	Ser	Gly	Asn	Gln	Asn	Arg	515	520	525	

Arg Pro Ile Ser Phe Pro Val Ile Ser Asn Met Gln Pro Asn Ile Thr  
 530 535 540

Asn Val Arg Ser Ala Ser Ala Pro Leu Cys Ser Ser Pro Val Pro Ser  
 545 550 555 560

Arg Arg Tyr Ser Gln Tyr Ala Thr Asn Ala Arg Tyr Thr Pro Arg Lys  
 565 570 575

Val Ser Ser Gly Ser Val Leu Arg Lys Ile Ser Ser Phe Phe Arg Lys  
 580 585 590

Asp

<210> 15  
 <211> 1462  
 <212> PRT  
 <213> Candida albicans

<400> 15  
 Met Ser Thr Val Val Asn Arg Arg Ser Ser His Gln Phe Asp Ser Pro  
 1 5 10 15

Ser Asn His Leu Asp His Ser Ser Ser Met Asn Val Asp Lys Val Val  
 20 25 30

Gln Ser Val Thr Asn Ala Thr Lys Arg Leu Ser Gln Ile Ser Thr Asn  
 35 40 45

Thr Asn Asn Ser Asn Lys Lys Arg Lys Thr Gln Asn Lys Ile Gly Pro  
 50 55 60

Trp Lys Leu Gly Arg Thr Leu Gly Arg Gly Ser Thr Gly Arg Val Arg  
 65 70 75 80

Leu Ala Lys Asn Thr Thr Thr Gly Gln Leu Ala Ala Val Lys Ile Val  
 85 90 95

Pro Lys Ser Asn Phe Lys Lys Leu Glu Asn Pro Lys Tyr Lys Arg Ser  
 100 105 110

Lys Glu Asp Ala Thr Arg Leu Pro Tyr Gly Ile Glu Arg Glu Ile Ile  
 115 120 125

Ile Met Lys Leu Ile Ser His Pro Asn Ile Met Gly Leu Tyr Asp Val  
 130 135 140

Trp Glu Asn Lys Asn Asp Leu Tyr Leu Ile Leu Glu Tyr Ile Glu Gly  
 145 150 155 160

Gly Glu Leu Phe Asp Tyr Leu Ile Lys Arg Gly Lys Leu Gln Glu Tyr  
 165 170 175

Glu Ala Ile Asn Tyr Phe Lys Gln Ile Ile Asn Gly Ile Asn Tyr Leu  
 180 185 190

His	Gln	Phe	Asn	Ile	Cys	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	195	200	205
Leu	Asp	Phe	Asn	Lys	Asn	Ile	Lys	Ile	Ala	Asp	Phe	Gly	Met	Ala	Ala	210	215	220
Leu	Glu	Val	Lys	Glu	Lys	Leu	Leu	Glu	Thr	Ser	Cys	Gly	Ser	Pro	His	225	230	235
Tyr	Ala	Ser	Pro	Glu	Ile	Val	Ala	Gly	Lys	Asn	Tyr	His	Gly	Ala	Pro	245	250	255
Ser	Asp	Ile	Trp	Ser	Cys	Gly	Ile	Ile	Leu	Phe	Ala	Leu	Leu	Thr	Gly	260	265	270
His	Leu	Pro	Phe	Asp	Asp	Glu	Asn	Ile	Arg	Lys	Leu	Leu	Leu	Lys	Val	275	280	285
Gln	Ser	Gly	Lys	Phe	Asn	Met	Pro	Pro	Glu	Leu	Ser	Phe	Glu	Ala	Lys	290	295	300
Asp	Leu	Ile	Thr	Lys	Met	Leu	Lys	Val	Asn	Pro	Arg	Glu	Arg	Ile	Thr	305	310	315
Ile	Asp	Ala	Ile	Leu	Thr	His	Pro	Leu	Leu	Ala	Lys	Tyr	Pro	Glu	Pro	325	330	335
Thr	Val	Ser	Tyr	Ser	Ser	Thr	Thr	Thr	Leu	Asp	Ile	Asn	Ser	Ile	Asn	340	345	350
Ile	Lys	Gln	Ile	Glu	Ser	Val	Asp	Lys	Ile	Asp	Lys	Glu	Ile	Leu	Lys	355	360	365
Asn	Leu	Ser	Val	Leu	Phe	His	Asn	Cys	Asp	Glu	Lys	Thr	Ile	Ile	Ser	370	375	380
Arg	Leu	Leu	Ser	Pro	Asn	Arg	Cys	Pro	Glu	Lys	Met	Phe	Tyr	Tyr	Leu	385	390	395
Leu	Met	Lys	Tyr	Arg	Asn	Glu	His	Leu	Ser	Asn	Ser	Asn	Ser	Phe	Asn	405	410	415
Ser	Ser	Asn	Asp	Val	Asp	Ser	Ala	Arg	Ser	Leu	Pro	Arg	Ser	Thr	Ser	420	425	430
Tyr	Val	Lys	Thr	Thr	Val	Thr	Asp	His	Ala	Thr	Gly	Glu	Lys	His	Thr	435	440	445
Thr	Val	Lys	Lys	Ile	Gln	Gln	Ser	Ser	Ser	Ile	Tyr	Ser	Asn	Arg	Ser	450	455	460
Leu	Leu	Lys	Lys	Ser	Thr	Ser	Ala	Lys	Gly	Asn	Val	Leu	Ser	Asn	Ile	465	470	475
Thr	Asn	Arg	Pro	Asn	Thr	Pro	Lys	Gln	Phe	Ser	Ala	Ser	Ser	Ser	Phe	485	490	495

Asn	Lys	Lys	Lys	Ala	Leu	His	Ser	Lys	Thr	Gln	Ile	Tyr	Ala	Ser	Arg
			500					505					510		
Ser	Arg	Asn	Ala	Ser	Ser	Arg	Ser	Leu	Lys	Ser	Asn	Ser	Ser	Thr	Gly
		515					520					525			
Arg	Asn	Gly	Asn	Asn	Ala	Ser	Val	Thr	Ser	Val	Asn	Lys	Ile	Pro	Glu
	530					535					540				
Ile	Thr	Gly	Ala	Thr	Val	Leu	Gln	Pro	Ile	Pro	Ser	Met	Ala	Met	Asn
545					550					555					560
Arg	Gly	Asp	Glu	Gln	Gln	Asn	Lys	Thr	Lys	Lys	Asn	Leu	Thr	Gly	Thr
				565					570					575	
Phe	Gly	Asn	Lys	Ser	Leu	Leu	Asn	Phe	Gln	Leu	Ile	Cys	Glu	Glu	Val
			580					585					590		
Phe	Glu	Asn	Asp	Lys	Glu	Asn	Ser	Lys	Pro	Val	Ser	Lys	Thr	Pro	Val
		595					600					605			
Ser	Gln	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Ile	Glu	Thr	Pro	Thr	Ser
	610					615					620				
Arg	Thr	Asn	Ser	Val	Lys	Arg	Gly	Lys	Thr	Trp	Ser	Leu	Ala	Arg	Arg
625					630					635					640
Glu	Arg	Glu	Leu	Ala	Glu	Gln	Val	Arg	Gln	Arg	Asn	Glu	Ala	Arg	Glu
				645					650					655	
Asn	Lys	Leu	Lys	Ala	Glu	Glu	Leu	Ala	Arg	Lys	Glu	Leu	Glu	Gln	Glu
			660					665					670		
Lys	Lys	Arg	Ile	Ala	Glu	Glu	Lys	Lys	Arg	Leu	Glu	Gln	Gln	Glu	Arg
		675					680					685			
Glu	Leu	Asp	Glu	Lys	Gln	Lys	Leu	Gln	Glu	Lys	Gln	Lys	Ala	Ala	Leu
	690					695					700				
Glu	Lys	Leu	Gln	Lys	His	Gln	Ser	Ala	His	Asp	Phe	Glu	Gly	Leu	Phe
705					710					715					720
Ala	Ser	Asn	Arg	Arg	Ser	Val	Thr	Asp	Met	Ala	Pro	Ser	Ser	Gly	Met
			725						730					735	
Ser	Ser	Leu	Asp	Pro	Arg	Ala	His	Met	Val	Ser	Arg	Ala	Asn	Thr	Ile
			740					745					750		
Gly	Ser	Pro	Asn	Leu	Ser	Ser	Ser	Ser	Val	Asn	Ile	Asp	Glu	Asn	Ala
		755					760					765			
Ser	Lys	Val	Leu	His	Lys	Phe	Gly	Ile	Asp	Val	Ala	Pro	Ser	Pro	Lys
	770					775					780				
Arg	Phe	Ser	Arg	Ala	Ser	Lys	Thr	Ser	Thr	Ser	Lys	Asn	Leu	Ser	Ser
785					790					795					800



Phe	Leu	Ala	Pro	Thr	Val	Ser	Arg	Asn	Leu	Ser	Ser	Gln	Leu	Lys	Thr		
				805					810					815			
Ser	Ser	Ser	Lys	Asn	Leu	Ala	Gly	Tyr	Leu	His	Gly	Thr	Thr	Asp	Thr		
			820					825					830				
Asn	Gly	Ser	Ala	Ile	Ala	Ala	Lys	Lys	Lys	Asp	Asp	Ser	Thr	Asn	Glu		
		835					840					845					
Ala	Leu	Thr	Ile	Glu	Glu	Phe	Asn	Ala	Lys	Glu	Arg	Thr	Ser	Met	Ser		
	850					855					860						
Pro	Ser	Ile	Ser	Lys	Ala	Ser	Val	Asn	Lys	Arg	Asn	Ser	Asn	Gln	Ser		
865					870					875				880			
Ser	Tyr	Tyr	Arg	Ser	Met	Phe	Ser	Asp	Asn	Gly	Asn	Asp	Asp	Asn	Val		
				885					890					895			
Thr	Lys	Val	Arg	Thr	Gly	Glu	Ser	His	Leu	Ser	Val	Gln	Glu	Glu	Glu		
			900					905					910				
Glu	Met	Asp	Met	Glu	Asn	Ala	Ile	Asp	Glu	Asp	Ile	Ser	Leu	Ile	Pro		
		915					920					925					
Asn	Pro	Arg	Phe	Ser	Arg	Phe	Ser	Phe	Gly	Gly	Leu	Leu	Gly	Ser	Asn		
	930					935					940						
Thr	Val	Ala	Asn	Glu	Glu	Gly	Asp	Trp	Thr	Ile	Met	Asn	Ser	Thr	Leu		
945					950					955					960		
Asn	His	Ser	Asn	Thr	Val	Val	Arg	Gly	Thr	His	Asn	Lys	Ser	Ser	Thr		
				965					970					975			
Met	Leu	Gly	Leu	Gly	Ile	Lys	Met	Arg	Asp	Thr	Thr	Thr	Ile	Lys	Glu		
			980					985					990				
Asp	Glu	Glu	Phe	Glu	Asp	Glu	Lys	Pro	Phe	Ile	Ser	Val	Pro	Ser	Ser		
		995					1000					1005					
Glu	Asp	Asp	Glu	Gly	Asn	Thr	His	Lys	Asn	Lys	Arg	Gly	Gly	Leu	Arg		
	1010					1015					1020						
Asp	Ser	Gly	Asn	Tyr	Asp	Phe	Asp	Glu	Glu	His	Ser	Val	Ala	Ser	Thr		
1025				1030					1035					1040			
Ala	Asn	Thr	Glu	Tyr	Ser	Asp	Val	Ala	Ser	Gln	Gly	Gln	Gln	Met	Pro		
			1045					1050						1055			
Gly	Ser	His	Thr	Ile	His	Gln	Leu	Glu	Thr	Glu	Leu	Ser	Asn	Phe	Asp		
			1060				1065						1070				
Leu	Leu	Ser	Tyr	Arg	Val	Ala	Asp	Ile	Gly	Lys	Val	Asn	Lys	His	Lys		
	1075						1080					1085					
Pro	Ser	Ile	Val	Asp	Ser	Lys	Glu	Thr	Leu	Leu	Lys	Asn	His	Ser	Ser		
	1090					1095					1100						

Asp Glu Ala Thr Ile Glu Val Lys Glu Asp Asn Asn Glu His Asp Phe  
 1105 1110 1115 1120  
 Asn Asp Lys Ile Lys Gln His Tyr Asp Asp Asn Gly Asp Ser Glu Glu  
 1125 1130 1135  
 Asp Asp Glu Asp Glu Asp Glu Glu Glu Asp Asp Asp Asp Asp  
 1140 1145 1150  
 Asp Ala Arg Ser Ser Phe Glu Ala Arg Pro His Ser His Asn Tyr Ser  
 1155 1160 1165  
 Leu Ala Glu Ile Thr Ser Glu Ser Pro Val Gly Gly Gly Tyr Glu Ser  
 1170 1175 1180  
 Pro Ser Ile Ala Asn Asp Phe Lys Lys Ser Arg His Ser Thr Gly Ile  
 1185 1190 1195 1200  
 Phe Ser Thr Thr Gln Phe Pro Arg Ser Pro Tyr Val Val Asn Asn Asn  
 1205 1210 1215  
 Gly Asp Ser Asn Lys Asp Glu Asn Ser Gln Gln Gln Thr Lys His Met  
 1220 1225 1230  
 Leu Asn Asp Gly His Lys Gly Leu Ile Thr Ser Pro Val Gln Asp Thr  
 1235 1240 1245  
 Phe Gly Ser Lys Lys Pro Val Glu Ser Asn Ser Leu Phe Arg Arg Leu  
 1250 1255 1260  
 Ser Leu Asn Pro Asn Arg Ala Ala Pro Lys Ala Pro Ala Pro Pro Pro  
 1265 1270 1275 1280  
 Pro Ser Ala Pro Ile Ser Ser Ala Ala Lys Ala Asn Ile Ser Gln Pro  
 1285 1290 1295  
 Leu Ser Ser Pro Thr Lys Gly His Asn Arg Phe Ser Arg Ile Ser Ile  
 1300 1305 1310  
 Gly Ser Lys Asn Met Leu Gln Lys Glu Asp Lys Ser Thr Lys Ser Asn  
 1315 1320 1325  
 Trp Phe Lys Lys Phe Phe His Ser Leu Thr Thr Pro Ser Ala Lys Asp  
 1330 1335 1340  
 Gln Ser Gly Asn Ser Ser Ser Lys Val Ala Ser Lys Asp Ile Lys Ile  
 1345 1350 1355 1360  
 Ile Asp Thr Ser Leu Thr Ala Ala Gln Leu Ile Arg Val Ile Lys Tyr  
 1365 1370 1375  
 Gln Leu Glu Leu Lys Lys Ile Glu Gly Ser Ile Ser Lys Val Asp Ile  
 1380 1385 1390  
 Asp Glu Glu Phe Gly Leu Ile Ser Gly Val Ile Pro Ser Lys Phe Ala  
 1395 1400 1405

Asn Gly Arg Lys Leu Lys Phe Lys Ile Glu Val Ile Asp Leu Ile Asn  
 1410 1415 1420

Ser Ser Ser Leu His Val Ile Lys Met Lys Gly Asn Asp Lys Gly Phe  
 1425 1430 1435 1440

Gln Ser Leu Val Asn Ile Val Thr Phe Ile Ile Lys Lys Glu Glu Gln  
 1445 1450 1455

Asp Lys Ile Ser Arg Arg  
 1460

<210> 16

<211> 1349

<212> PRT

<213> Candida albicans

<400> 16

Met Pro His Ser Arg Gln Pro Ser Ile Ser Ser Ser Ile Met Ser Gln  
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Ser Asn His Asn His Pro Gln Lys Ile Gly Pro Trp Lys Leu Gly Lys  
 20 25 30

Thr Leu Gly Arg Gly Ala Thr Gly Arg Val Leu Leu Ala Thr His Gln  
 35 40 45

Thr Thr Gly Gln Lys Ala Ala Val Lys Val Val Ser Lys Ser Glu Leu  
 50 55 60

Gln Asp Glu Glu Thr Glu Lys Asn Gly Asp Gly Leu Pro Tyr Gly Ile  
 65 70 75 80

Glu Arg Glu Ile Ile Ile Met Lys Leu Leu Thr His Pro Asn Val Leu  
 85 90 95

Arg Leu Tyr Asp Val Trp Glu Thr Ser Lys Ala Leu Tyr Leu Val Leu  
 100 105 110

Glu Tyr Val Glu Gly Gly Glu Leu Phe Asp Leu Leu Val Glu Arg Gly  
 115 120 125

Pro Leu Pro Glu Val Glu Ala Ile Lys Tyr Phe Arg Gln Ile Ile Leu  
 130 135 140

Gly Thr Ala Tyr Cys His Ala Leu Gly Ile Cys His Arg Asp Leu Lys  
 145 150 155 160

Pro Glu Asn Leu Leu Leu Asp Ser Gln Leu Asn Val Lys Leu Ala Asp  
 165 170 175

Phe Gly Met Ala Ala Leu Glu Ser Asn Gly Lys Leu Leu Glu Thr Ser  
 180 185 190

Cys Gly Ser Pro His Tyr Ala Ala Pro Glu Ile Val Ser Gly Leu Lys  
 195 200 205

Tyr	His	Gly	Ala	Ala	Ser	Asp	Val	Trp	Ser	Cys	Gly	Val	Ile	Leu	Phe
210						215					220				
Ala	Leu	Leu	Thr	Gly	Arg	Leu	Pro	Phe	Asp	Asp	Glu	Asn	Ile	Arg	Asn
225					230					235					240
Leu	Leu	Leu	Lys	Val	Gln	Ala	Gly	Asn	Phe	Glu	Met	Pro	Val	Asp	Glu
				245					250					255	
Val	Ser	Arg	Glu	Ala	Arg	Asp	Leu	Ile	Ala	Arg	Met	Leu	Glu	Val	Asp
			260					265						270	
Pro	Met	Arg	Arg	Ile	Ser	Thr	Glu	Lys	Ile	Leu	Arg	His	Pro	Leu	Leu
		275					280					285			
Thr	Lys	Tyr	Pro	Met	Ser	Asn	Glu	Asp	Leu	Ile	Ser	Glu	Lys	Ser	Leu
	290					295					300				
Pro	His	Pro	Gln	Thr	Gly	Tyr	Lys	Ser	Leu	Gly	Ser	Val	Arg	Asn	Ile
305					310					315					320
Asp	Lys	Gln	Ile	Leu	Ser	Asn	Leu	Thr	Ile	Leu	Trp	Asn	Asp	Arg	Pro
				325					330					335	
Glu	Glu	Glu	Ile	Val	Asp	Cys	Leu	Leu	Lys	Asp	Gly	Ser	Asn	Pro	Glu
			340					345					350		
Lys	Thr	Phe	Tyr	Ala	Leu	Leu	Met	Arg	Tyr	Lys	His	Asn	Gln	Glu	Asp
		355					360					365			
Asn	Thr	Asn	Asn	Asn	Ser	Pro	Lys	Lys	Ser	Thr	Ser	Phe	Asn	Asn	Lys
	370					375					380				
Val	Val	Arg	Ser	Gly	Ser	Lys	Tyr	Ser	Leu	Asn	Gly	Thr	Pro	Arg	Arg
385					390					395					400
Lys	Arg	Ala	Ser	His	Ile	Ser	Val	Ser	Arg	Pro	Thr	Ser	Phe	Gln	Tyr
				405					410					415	
Lys	Ser	Asn	Pro	Gly	Ala	Gly	Ala	Thr	Ala	Asn	Arg	Asn	Ser	Val	Ala
			420					425						430	
Arg	His	Ser	Val	Ala	Ser	Ser	Ala	Asn	Asn	Ser	Pro	Arg	Lys	Ser	Pro
		435					440					445			
Tyr	Lys	Ser	Pro	Tyr	Arg	Ser	Pro	Tyr	Arg	Ser	Pro	Tyr	Lys	Ser	Pro
	450					455					460				
Ser	Lys	Arg	Tyr	Ser	Tyr	Asn	Gln	Ser	Pro	Thr	Lys	Ser	Pro	Tyr	Gly
465					470					475					480
Arg	Arg	Ser	Asn	Ser	Gln	Arg	Gln	Phe	Glu	Asn	Glu	Pro	Leu	Lys	Ala
				485					490					495	
Lys	Pro	Arg	Asn	Ile	Tyr	Asn	Glu	Ile	Val	Asp	Ala	Gln	Ser	Asn	Phe
			500					505						510	

Ser	Leu	Pro	Pro	Ser	Leu	Pro	Pro	Ser	Leu	Pro	Ser	Lys	Asp	Ser	Arg
	515						520					525			
Tyr	Met	Ile	Asp	Glu	Pro	Asn	Gln	Pro	Gln	Leu	Gln	Gln	Pro	Ala	Leu
	530					535					540				
Ser	Gln	Val	Pro	Glu	Asn	Pro	Ile	Val	Asp	Glu	Ser	Pro	Asp	Leu	Met
545					550					555					560
Gln	Ser	Ala	Lys	Ile	Ser	Ser	Gly	Lys	Arg	Asn	Ser	Ile	Ile	Gly	Lys
				565					570					575	
Asn	Asn	Asn	Asn	Ser	Asn	Ser	Asn	Lys	Arg	Met	Ser	Lys	Arg	Lys	Ser
				580				585					590		
Ile	Arg	Ala	Ser	Met	Thr	Thr	Gly	Leu	Lys	Arg	Asn	Ser	Ile	Thr	Met
				595			600						605		
Lys	Leu	Leu	Ser	Thr	Tyr	Ala	Lys	Leu	Ser	Gly	Asp	Asp	Asp	Trp	Glu
	610					615					620				
Tyr	Met	Asp	Lys	Gln	Thr	Lys	Arg	Thr	Ser	Ala	Thr	Phe	Ala	Ala	Leu
625					630					635					640
Cys	Asp	Lys	Ile	Phe	Asn	Gln	Glu	Asp	Tyr	Asp	Glu	Glu	Asp	Glu	Gln
				645					650					655	
Leu	Val	Asp	Pro	Glu	Glu	Lys	Glu	Ala	Lys	Glu	Tyr	Glu	Arg	Leu	Met
			660					665					670		
Glu	Leu	Glu	Arg	Lys	Lys	His	Glu	Ala	Glu	Leu	Lys	Ala	Arg	Arg	Glu
		675					680					685			
Leu	Glu	Lys	Lys	Lys	Arg	Arg	Gln	Lys	Arg	Arg	Ser	Ile	Leu	Ser	Ser
	690					695					700				
Lys	Lys	Leu	Ser	Ile	Ile	Val	Lys	Asn	Asp	Ala	Asp	Pro	Asn	Asn	Ser
705					710					715					720
Glu	Gln	Glu	Leu	Val	Asp	Glu	Gly	Ile	Lys	Gln	Pro	Lys	Arg	Gln	Ser
				725					730					735	
Lys	Asn	Leu	Thr	Ala	Leu	Arg	Ala	Leu	Ser	Glu	Gly	Asn	His	Ala	Ser
			740					745					750		
Glu	Glu	Leu	Thr	Leu	Glu	Asp	Val	Glu	Asn	Leu	Lys	Arg	Arg	Ser	Ala
		755					760					765			
Ser	Gln	Pro	Val	Pro	Lys	Arg	Arg	Gln	Thr	Pro	Val	Leu	Thr	Arg	Arg
	770					775					780				
Pro	Val	Ser	Arg	Leu	Asp	Pro	Leu	Trp	Gln	Ala	His	Glu	Asn	Glu	Gln
785					790					795					800
Leu	Asp	Arg	Ala	Lys	Asp	Ala	Leu	Glu	Gln	Glu	Trp	Arg	Asp	Ser	Gln
				805					810					815	

Lys Arg Ser Ser Thr Val Ser Arg Lys Lys Val Asn Arg Glu Ser Met  
 820 825 830  
 Ile Ser Val Met Asp Asp Ile Val Glu Glu Asp Gln Gly Arg Val Asn  
 835 840 845  
 Arg Arg Ser Thr Arg Asn Thr Tyr Tyr Glu Arg Glu Arg Asp Tyr Glu  
 850 855 860  
 Leu Pro Glu Pro Thr Val Glu Asp Ser Asn Leu Thr Asp Asp Tyr Met  
 865 870 875 880  
 Thr Glu Ile Arg Lys Ser Arg Leu Leu Asn Ser Gln Leu Asn Val Arg  
 885 890 895  
 Asp Pro Leu Asn Glu Lys Arg Lys Ser Glu Pro Lys Thr Leu Ile Ser  
 900 905 910  
 Asn Val Gln Ile Pro Ser Val Thr Arg Lys Ser Arg Asn Phe Thr Thr  
 915 920 925  
 Ser Asn Lys Arg Leu Ser Val Leu Ser Met Tyr Ser Thr Lys Glu Ser  
 930 935 940  
 Tyr Arg Asp Leu Asn Ser Ile Ile Asn Ser Pro Asp Glu Asn Pro Glu  
 945 950 955 960  
 Gln His Gln Asn Met Asn Lys Pro Ala Leu Arg Thr Ser Ile Ala Asp  
 965 970 975  
 Arg Leu Asp Lys Ala Gly Leu Ala Glu Pro Glu Tyr Glu Thr Glu Thr  
 980 985 990  
 Asp Gly Glu Asp Lys Val Ser Val Ile Asp Leu Asp Asp His Leu Ala  
 995 1000 1005  
 Asp Arg Arg Thr Ser Tyr Tyr Asp Gly Ser Gly Lys Arg Ala Ser Arg  
 1010 1015 1020  
 Ala Ser Thr Thr Lys Arg Tyr Asn Val His Ser Ser Ser Gly Gln Arg  
 1025 1030 1035 1040  
 Pro Lys Ser Lys Val Pro Asp Leu Pro Lys Asn Asp Tyr Asp Asp Thr  
 1045 1050 1055  
 Phe Val Ser Asn Ser Asp Glu Val His Lys Arg Gln Tyr Lys Ser Met  
 1060 1065 1070  
 Val Ser Asp Glu Ser Ser Ala Ser Asp Asp Val Phe Asp Lys Ile Lys  
 1075 1080 1085  
 Leu Pro Asp Gly Lys Ser Thr Lys Ser Ser Ile Asp Glu Leu Ala Asn  
 1090 1095 1100  
 Gly Thr Ser Thr Ser Gly His Arg Lys Pro Lys Ile Arg His Ser Gln  
 1105 1110 1115 1120

Pro Gly Pro Glu Met Leu Ile Pro His Leu Asn Gly Gly Ile Glu Ser  
                   1125                  1130                  1135  
 Ser Gln Pro Met Ser Lys Val Arg Gly Asn Asn Ser Ser Gly His Asp  
                   1140                  1145                  1150  
 Asp Ser Val Pro Pro Pro Pro Pro Ala His Lys Val Asn Lys Lys Pro  
                   1155                  1160                  1165  
 Leu Asp Asp Lys Thr Asn Phe Pro Pro Pro Glu Val Asp Pro Lys Arg  
                   1170                  1175                  1180  
 Lys Gly Ser Phe Phe Arg Lys Leu Ser Trp Gly Ser Lys Lys Thr Ile  
 1185                  1190                  1195                  1200  
 Glu Asn Asn Thr Asn Ala Ala Thr Asn Thr Thr Thr Gln Gln Gln Leu  
                   1205                  1210                  1215  
 Pro Ser Pro Ala Glu Ser Lys Glu Glu Lys Pro Lys Ser Ser Phe Phe  
                   1220                  1225                  1230  
 Arg Trp Phe Ser Ser Ser Asn Thr Pro Ser Ala Ala Glu Ile Arg Lys  
                   1235                  1240                  1245  
 Phe Asn Thr Ile Leu Pro Lys His Glu Met Ser Thr Ala Leu Phe Ala  
                   1250                  1255                  1260  
 Leu Leu Asn Ser Trp Ser Asn Phe Gly Leu Lys Asp Leu Arg Asn Asp  
 1265                  1270                  1275                  1280  
 Gln Val Gly Tyr Tyr Ile Thr Gly Ala Ile Ser Lys His Asn Ser Phe  
                   1285                  1290                  1295  
 Asn Leu Lys Ser Cys Lys Phe Arg Ile Lys Ile Asn Gln Arg Asp Phe  
                   1300                  1305                  1310  
 Asn Gln Lys Ser Glu Ile Val Cys Val Arg Val Lys Gly Ser Lys Val  
                   1315                  1320                  1325  
 Thr Thr Asp Thr Leu Phe Ser Glu Ile Glu Lys Val Leu Leu Lys Glu  
                   1330                  1335                  1340  
 Gly Val Leu Asp Lys  
 1345

<210> 17  
 <211> 1029  
 <212> PRT  
 <213> *Saccharomyces cerevisiae*

<400> 17  
 Met Thr Leu Asp Tyr Glu Ile Tyr Lys Glu Gly Gly Ile Leu Asn Asn  
   1                  5                  10                  15  
 Arg Tyr Gln Lys Ile Glu Asp Ile Ser Glu Gly Ser Tyr Gly Tyr Val  
                   20                  25                  30

Ser	Leu	Ala	Lys	Asp	Val	Arg	Glu	Lys	Arg	Leu	Val	Ala	Val	Lys	Tyr	35	40	45	
Ile	Phe	Lys	Leu	Glu	Asp	Asp	Gly	Gln	Tyr	Asp	Gly	Pro	Gln	Asp	Asp	50	55	60	
Glu	Asn	Asp	Cys	Asp	Ser	Ser	Asp	Cys	Asp	Asp	Asp	Glu	Asp	Thr	Lys	65	70	75	80
Val	Asp	Thr	Asp	Arg	His	Glu	Asn	Glu	Asn	Gly	Asn	Ala	Ser	Ser	Asn	85	90	95	
Asn	Gly	Ser	Ser	Arg	Glu	Lys	Lys	His	Asn	Leu	Tyr	Lys	His	Lys	Lys	100	105	110	
Ser	Leu	Ile	Ser	Ser	Lys	Val	Lys	Ser	Arg	Leu	Ser	Asn	Asn	Ile	Cys	115	120	125	
Leu	Glu	Ala	Met	Tyr	Glu	Val	Asp	Ile	Gln	Thr	Lys	Ile	Gly	Arg	His	130	135	140	
Gln	Asn	Ile	Ala	Ala	Leu	Leu	Asp	Phe	Phe	Asp	Ser	Tyr	Ile	Ile	Met	145	150	155	160
Glu	Tyr	Cys	Ser	Gly	Gly	Asp	Leu	Tyr	Glu	Ala	Ile	Lys	Ala	Asp	Ala	165	170	175	
Val	Pro	Lys	Lys	Thr	Lys	Ser	Ile	Thr	His	Ile	Ile	Thr	Gln	Ile	Met	180	185	190	
Asp	Ala	Ile	Glu	Tyr	Val	His	Asn	Lys	Gly	Ile	Tyr	His	Arg	Asp	Ile	195	200	205	
Lys	Pro	Glu	Asn	Ile	Leu	Ile	Ser	Gly	Ile	Asp	Trp	Thr	Ile	Lys	Leu	210	215	220	
Thr	Asp	Trp	Gly	Leu	Ala	Thr	Thr	Asp	Lys	Thr	Ser	Met	Asp	Arg	Asn	225	230	235	240
Val	Gly	Ser	Glu	Arg	Tyr	Met	Ser	Pro	Glu	Leu	Phe	Asp	Ser	Asn	Leu	245	250	255	
Asp	Ile	Lys	Glu	Arg	Lys	Glu	Pro	Tyr	Asp	Cys	Ala	Lys	Val	Asp	Leu	260	265	270	
Trp	Ala	Met	Gly	Ile	Val	Phe	Leu	Asn	Ile	Val	Phe	His	Lys	Asn	Pro	275	280	285	
Phe	Ser	Ile	Ala	Asn	Gln	Ser	Asp	Lys	Ser	Phe	Cys	Tyr	Phe	Ala	Ala	290	295	300	
Asn	Arg	Glu	Ala	Leu	Phe	Asp	Val	Phe	Ser	Thr	Met	Ala	Tyr	Asp	Phe	305	310	315	320
Phe	Gln	Val	Leu	Arg	Tyr	Ser	Leu	Thr	Ile	Asp	Pro	Ala	Asn	Arg	Asp	325	330	335	



Leu	Lys	Met	Met	Arg	Thr	Glu	Leu	Gln	Asn	Leu	Ser	Glu	Tyr	Thr	Leu
			340					345					350		
Asp	Asp	Glu	Tyr	Tyr	Asn	Asn	Leu	Asp	Glu	Gly	Tyr	Glu	Glu	Thr	Met
		355					360					365			
Ile	Asp	Gly	Leu	Pro	Pro	Gln	Pro	Val	Pro	Pro	Ser	Ser	Ala	Pro	Val
	370					375					380				
Ser	Leu	Pro	Thr	Pro	Ile	Ser	Ser	Ser	Asn	Lys	Gln	His	Met	Pro	Glu
385					390					395					400
Phe	Lys	Lys	Asp	Phe	Asn	Phe	Asn	Asn	Val	Asn	Glu	Arg	Lys	Arg	Ser
				405					410					415	
Asp	Val	Ser	Gln	Asn	Gln	Asn	Val	Ala	Ser	Gly	Phe	Phe	Lys	Lys	Pro
			420					425					430		
Ser	Thr	Gln	Gln	Gln	Lys	Phe	Phe	Asn	Gln	Gly	Tyr	Asn	Thr	Thr	Leu
		435					440					445			
Ser	Thr	His	Glu	Arg	Ala	Lys	Ser	Ala	Pro	Lys	Phe	Lys	Phe	Lys	Lys
		450				455					460				
Arg	Asn	Lys	Tyr	Gly	Arg	Thr	Asp	Asn	Gln	Phe	Ser	Lys	Pro	Val	Asn
465					470					475					480
Ile	Glu	Asp	Arg	Lys	Lys	Ser	Lys	Ile	Leu	Lys	Lys	Ser	Arg	Lys	Pro
				485					490					495	
Leu	Gly	Ile	Pro	Thr	Pro	Asn	Thr	His	Met	Asn	Asn	Phe	Phe	His	Asp
			500					505					510		
Tyr	Lys	Ala	Arg	Asp	Glu	Phe	Asn	Thr	Arg	Asp	Phe	Phe	Thr	Pro	Pro
		515					520					525			
Ser	Val	Gln	His	Arg	Tyr	Met	Glu	Gly	Phe	Ser	Asn	Asn	Asn	Asn	Lys
		530				535					540				
Gln	Tyr	Arg	Gln	Asn	Arg	Asn	Tyr	Asn	Asn	Asn	Asn	Asn	Asn	Ser	Asn
545					550					555					560
Asn	Asn	His	Gly	Ser	Asn	Tyr	Asn	Asn	Phe	Asn	Asn	Gly	Asn	Ser	Tyr
				565					570					575	
Ile	Lys	Gly	Trp	Asn	Lys	Asn	Phe	Asn	Lys	Tyr	Arg	Arg	Pro	Ser	Ser
			580					585					590		
Ser	Ser	Tyr	Thr	Gly	Lys	Ser	Pro	Leu	Ser	Arg	Tyr	Asn	Met	Ser	Tyr
		595					600					605			
Asn	His	Asn	Asn	Asn	Ser	Ser	Ile	Asn	Gly	Tyr	Ala	Arg	Arg	Gly	Ser
	610					615					620				
Thr	Thr	Thr	Val	Gln	His	Ser	Pro	Gly	Ala	Tyr	Ile	Pro	Pro	Asn	Ala
625					630					635					640

Arg	Asn	His	His	Val	Ser	Pro	Thr	Asn	Gln	Phe	Leu	Arg	Val	Pro	Gln
				645					650					655	
Ser	Thr	Ala	Pro	Asp	Ile	Ser	Thr	Val	Leu	Gly	Gly	Lys	Pro	Ser	Tyr
			660					665					670		
Gln	Glu	His	Tyr	Thr	Gln	Asp	Ser	Met	Asp	Ser	Glu	Gly	Asp	His	Asp
		675					680					685			
Ser	Asp	Asp	Val	Leu	Phe	Thr	Leu	Glu	Glu	Gly	Asp	His	Asp	Phe	Val
	690					695					700				
Asn	Gly	Met	Asp	Asn	Leu	Ser	Ile	Asn	Asp	His	Leu	Pro	His	Thr	Thr
705					710					715					720
Val	Gly	Ser	His	Asn	Glu	Val	Phe	Val	His	Ala	Ser	Thr	Asn	His	Asn
				725					730					735	
Asn	Asn	Gly	Asn	Asn	Asn	His	Ile	Asp	Thr	Asn	Ser	Thr	Thr	Asn	Gln
			740					745						750	
Tyr	His	Arg	Gln	Tyr	Ile	Pro	Pro	Pro	Leu	Thr	Thr	Ser	Leu	His	Ile
		755					760					765			
Asn	Asn	Asn	Asn	Asn	Glu	Ser	Asn	Glu	Leu	Pro	Asp	Leu	Leu	Lys	Ser
		770				775					780				
Pro	Ala	Ser	Ser	Glu	Ala	His	Leu	Asn	Leu	Ser	Ser	Gly	Pro	Ile	Asp
785					790					795					800
Pro	Ile	Leu	Thr	Gly	Asn	Ile	Gly	Asn	Arg	Tyr	Ser	His	Ser	Ser	Asp
				805					810					815	
Ser	Lys	Glu	Leu	Glu	Gln	Glu	Arg	Arg	Leu	Ser	Met	Glu	Gln	Lys	Phe
			820					825					830		
Lys	Asn	Gly	Val	Tyr	Val	Pro	Pro	His	His	Arg	Lys	Ser	Phe	Asn	Leu
		835					840					845			
Gly	Thr	Gln	Val	Pro	Pro	Met	Asn	Met	Lys	Thr	Ser	Asn	Glu	Ala	Thr
	850					855					860				
Leu	Ser	Val	Ser	His	Asn	Ser	Val	Asn	Phe	Gly	Gly	Ser	Tyr	Asn	Ser
865					870					875					880
Arg	Arg	Ser	Ser	Ala	Asn	Glu	Ser	Asn	Pro	Leu	His	Met	Asn	Lys	Ala
				885					890					895	
Leu	Glu	Lys	Leu	Ser	Ser	Ser	Pro	Gly	Ala	Lys	Ser	Ser	Phe	Val	Gly
			900					905					910		
Phe	Pro	Lys	Pro	Leu	Leu	Pro	Arg	Asn	His	Ser	Ser	Thr	Thr	Ile	Ala
		915					920					925			
Leu	Gln	Asn	Glu	Asp	Val	Phe	Ala	Asp	Ser	Asn	Asn	Asp	Ala	Ile	Ile
	930					935					940				

Phe Glu Asp Glu Glu Tyr Glu Gly Glu Ser Asp Lys Met Ala His Gly  
 945 950 955 960  
 Lys Met Glu Gly Gly Asp Asn Glu Ser Ser Ser Thr Ser Pro Asp Glu  
 965 970 975  
 Arg Gln Ile Phe Gly Pro Tyr Glu Ile Tyr Ala Gln Thr Phe Ala Gly  
 980 985 990  
 Ser Thr His Asp Lys Lys Leu Gly Ala Gly Arg Lys Thr Ser Ile Gln  
 995 1000 1005  
 Asp Glu Met Val Gly Ser Leu Glu Gln Tyr Lys Asn Asn Trp Leu Ile  
 1010 1015 1020  
 Leu Gln Gln Gln Asp  
 1025

<210> 18  
 <211> 502  
 <212> PRT  
 <213> *Saccharomyces cerevisiae*

<400> 18  
 Met Leu Ser Asp Cys Leu Leu Asn Asn Phe Arg Ile Thr Ala Gln Ile  
 1 5 10 15  
 Gly Ser Gly Ala Tyr Gly Leu Val Phe His Val Val Asp Ile Leu Thr  
 20 25 30  
 Ser Arg Glu Tyr Ala Val Lys Thr Val Phe Lys Ser Ser Ser Met Asp  
 35 40 45  
 Glu Phe Tyr Asn Lys Asn Gly Leu Asn Asn Asn Ser Gln Val Ala Arg  
 50 55 60  
 Thr Thr Leu Leu Gln Thr Gln Leu Tyr His Phe Phe Lys Ser Phe Gln  
 65 70 75 80  
 Lys Lys Leu Phe Leu Pro Ser Val Asp Leu Asp Ser Ile Leu Gln Leu  
 85 90 95  
 Thr Glu Asn Glu Leu Asn Arg Leu Pro His Tyr Arg Glu Ile Ala Phe  
 100 105 110  
 Gln Leu Arg Val Gln Ser His Gly Asn Ile Val Lys Ile His Gln Val  
 115 120 125  
 Leu Glu Ser Ser Ile Ala Thr Phe Ile Val Met Asp Tyr Tyr Asp Arg  
 130 135 140  
 Asp Leu Phe Thr Ser Ile Val Asp Asp Lys His Phe Val Asn His Gly  
 145 150 155 160  
 Ile Leu Ile Lys Lys Val Phe Leu Gln Leu Cys Ser Ala Leu Asp His  
 165 170 175

Cys	His	Arg	Leu	Gly	Ile	Tyr	His	Cys	Asp	Ile	Lys	Pro	Glu	Asn	Val	180	185	190
Leu	Leu	Asp	Arg	Asn	Asp	Asn	Ala	Tyr	Leu	Cys	Asp	Phe	Gly	Leu	Ser	195	200	205
Thr	Lys	Ser	Lys	Tyr	Leu	Ala	Pro	Asn	Val	Cys	Val	Gly	Ser	Ser	Tyr	210	215	220
Tyr	Met	Ala	Pro	Glu	Arg	Ile	Leu	Tyr	Cys	Leu	Asn	Thr	Thr	Thr	Asn	225	230	235
Gly	Ile	His	Val	Asp	Glu	Cys	Cys	Ser	Ser	Leu	Pro	Thr	Asp	Thr	Gly	245	250	255
Asp	Ile	Trp	Ser	Leu	Gly	Ile	Ile	Leu	Ile	Asn	Leu	Thr	Cys	Ile	Arg	260	265	270
Asn	Pro	Trp	Leu	Lys	Ala	His	Gln	Lys	Glu	Asp	Asn	Thr	Phe	Gln	His	275	280	285
Phe	Ala	Asn	Asp	Asn	Asn	Val	Leu	Lys	Lys	Ile	Leu	Pro	Ile	Ser	Asp	290	295	300
Glu	Leu	Phe	Thr	Val	Leu	Thr	Lys	Ile	Leu	Gln	Leu	Asn	Pro	Tyr	Thr	305	310	315
Arg	Ile	Asp	Met	Lys	Thr	Leu	Met	Ser	Glu	Val	Ser	Ser	Leu	Thr	Ser	325	330	335
Phe	Thr	Arg	Glu	Gly	Pro	Leu	Ser	Gln	Val	Pro	Ile	Leu	Ser	Ser	Glu	340	345	350
Val	Tyr	Met	Thr	His	Ile	Ile	Arg	Asn	Glu	Asn	Leu	Phe	Leu	Ser	Asp	355	360	365
Leu	Ser	His	Phe	Ser	Ala	Asp	Gln	Glu	Gln	Gln	Gln	Gln	Gln	Gln	Gln	370	375	380
Gln	Gln	Gln	Gln	Val	Gln	Glu	Gln	Glu	Gln	Glu	Gln	Lys	Gln	Glu	Gln	385	390	395
Ile	Gln	Asn	Gln	Glu	Gln	Ala	Gln	Gln	Gln	Gln	Glu	Glu	Glu	Asp	Ala	405	410	415
Glu	Pro	Glu	Ser	Asp	Ile	Pro	Ser	Thr	Tyr	Asn	Ser	Asp	Gly	Ser	Met	420	425	430
Glu	Lys	Tyr	Glu	Tyr	Thr	Asn	Asn	His	Asn	Asn	Ser	Thr	Phe	Leu	Thr	435	440	445
Ser	Ser	Met	Asp	Ser	Thr	Pro	Tyr	Gln	Ser	Asp	Ile	Asp	Asp	Val	Ser	450	455	460
Ala	Ser	Lys	Asp	Cys	Lys	Phe	Gln	Gln	Asp	Thr	Leu	Arg	Asn	Arg	Leu	465	470	475

Leu Cys Leu Gln Met Asn Phe Ser Thr Leu Thr Asp Gly Pro Asn Glu  
485 490 495

Lys Trp Leu Pro Asp Tyr  
500

<210> 19

<211> 461

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 19

Met Met Met Phe His Asn Cys Arg Ile Asn Asn Tyr Leu Ile Thr Ser  
1 5 10 15

Gln Ile Gly Glu Gly Ala Tyr Gly Leu Val Tyr Arg Ala Leu Asp Ile  
20 25 30

Arg Thr Asp Arg Gln Tyr Ala Ile Lys Ala Val Val Gln Ser Tyr Gly  
35 40 45

Val Ser Lys Glu Ala Asp Met Gly Asn Asp Lys Ile His Lys Asn Ser  
50 55 60

Val Lys Leu Gln Lys Lys Leu Ala Lys Leu Phe Lys Glu Ser Lys Asn  
65 70 75 80

Val Val Arg Val Pro Ser Ile Asp Leu Glu Ser Ile Glu Asn Met Ser  
85 90 95

Glu Glu Asp Phe Lys Lys Leu Pro His Tyr Lys Glu Ile Ser Leu His  
100 105 110

Leu Arg Val His His His Lys Asn Ile Val Thr Ile His Glu Val Leu  
115 120 125

Gln Ser Ala Val Cys Thr Phe Ile Val Met Asp Tyr Tyr Pro Thr Asp  
130 135 140

Leu Phe Thr Ser Ile Val Asp Asn Arg His Phe Val Thr Asn Gly Leu  
145 150 155 160

Leu Val Lys Lys Val Phe Leu Gln Ile Cys Ser Ala Leu Asn Tyr Cys  
165 170 175

His Glu His Gly Ile Tyr His Cys Asp Ile Lys Pro Glu Asn Leu Leu  
180 185 190

Leu Asp Thr Glu Asp Asn Val Phe Leu Cys Asp Phe Gly Leu Ser Thr  
195 200 205

Thr Ser Thr Tyr Ile Lys Pro Asn Val Cys Ile Gly Ser Ser Tyr Tyr  
210 215 220

Met Pro Pro Glu Arg Ile Ser Phe Asp Gly Arg Val Ser Ser Ser Lys  
225 230 235 240

Ser	Gly	Gly	His	Lys	Leu	Gly	Lys	Val	Cys	Pro	Ser	Cys	Asn	Gly	Asp
				245					250					255	
Leu	Trp	Ser	Leu	Gly	Ile	Ile	Leu	Ile	Asn	Leu	Thr	Cys	Ile	Arg	Asn
			260					265					270		
Pro	Trp	Leu	Lys	Ala	Asp	Lys	Thr	Glu	Asp	Asn	Thr	Tyr	Tyr	Tyr	Phe
		275					280					285			
Thr	Lys	Asp	Pro	Asn	Ile	Leu	Lys	Gln	Ile	Leu	Pro	Leu	Ser	Asp	Asp
	290					295					300				
Phe	Tyr	Ser	Leu	Leu	Ser	Lys	Ile	Leu	Gln	Val	Asn	Pro	Lys	Asn	Arg
305					310					315					320
Met	Ser	Leu	Gln	Glu	Leu	Met	Lys	Glu	Val	Ser	Ser	Ile	Thr	Ser	Phe
				325					330					335	
Thr	Asn	Glu	Gly	Pro	Leu	Ser	Lys	Val	Pro	Pro	Leu	Ser	Lys	Ser	Val
			340					345					350		
Tyr	Glu	Lys	Phe	Val	Ser	Pro	Val	Asp	Asn	Thr	Asn	Glu	Asn	Leu	Ser
	355						360					365			
Pro	Lys	Ser	Tyr	Val	Tyr	Met	His	Asp	Ser	Lys	Ala	Ala	Lys	Asn	Leu
	370					375					380				
Ser	Tyr	Thr	Ser	Ser	Ser	Glu	Glu	Glu	Asp	Gly	Ile	Lys	Glu	Gly	Ile
385					390					395					400
Asp	Asp	Asp	Asn	Gly	Ser	Arg	Ser	Gly	Ser	Phe	Gly	Thr	Leu	Asp	Thr
				405					410					415	
Asp	Thr	Gly	Leu	His	Ser	Ser	Phe	Thr	Ser	Thr	Ser	Cys	Glu	Ser	Asp
			420					425					430		
Asn	Glu	Cys	Ser	Lys	Ile	Ser	Asn	Lys	Phe	Ser	Leu	Phe	Glu	Lys	Lys
		435					440					445			
Phe	Asn	Glu	Leu	Arg	Met	Ser	Ser	Ser	Ser	Leu	Thr	Asn			
	450					455					460				

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<210> 20
<211> 470
<212> PRT
<213> Schizosaccharomyces pombe
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<400> 20
Met Met Arg Glu Asn Pro Glu Leu Leu Leu Gly Gln Val Leu Gly Asp
 1              5              10              15

Ser Leu Arg Phe Val Ser Ile Ile Gly Ala Gly Ala Tyr Gly Val Val
      20              25              30

Tyr Lys Ala Glu Asp Ile Tyr Asp Gly Thr Leu Tyr Ala Val Lys Ala
      35              40              45

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Leu	Cys	Lys	Asp	Gly	Leu	Asn	Glu	Lys	Gln	Lys	Lys	Leu	Gln	Ala	Arg	50	55	60
Glu	Leu	Ala	Leu	His	Ala	Arg	Val	Ser	Ser	His	Pro	Tyr	Ile	Ile	Thr	65	70	75
Leu	His	Arg	Val	Leu	Glu	Thr	Glu	Asp	Ala	Ile	Tyr	Val	Val	Leu	Gln	85	90	95
Tyr	Cys	Pro	Asn	Gly	Asp	Leu	Phe	Thr	Tyr	Ile	Thr	Glu	Lys	Lys	Val	100	105	110
Tyr	Gln	Gly	Asn	Ser	His	Leu	Ile	Lys	Thr	Val	Phe	Leu	Gln	Leu	Ile	115	120	125
Ser	Ala	Val	Glu	His	Cys	His	Ser	Val	Gly	Ile	Tyr	His	Arg	Asp	Leu	130	135	140
Lys	Pro	Glu	Asn	Ile	Met	Val	Gly	Asn	Asp	Val	Asn	Thr	Val	Tyr	Leu	145	150	155
Ala	Asp	Phe	Gly	Leu	Ala	Thr	Thr	Glu	Pro	Tyr	Ser	Ser	Asp	Phe	Gly	165	170	175
Cys	Gly	Ser	Leu	Phe	Tyr	Met	Ser	Pro	Glu	Cys	Gln	Arg	Glu	Val	Lys	180	185	190
Lys	Leu	Ser	Ser	Leu	Ser	Asp	Met	Leu	Pro	Val	Thr	Pro	Glu	Pro	Ile	195	200	205
Glu	Ser	Gln	Ser	Ser	Ser	Phe	Ala	Thr	Ala	Pro	Asn	Asp	Val	Trp	Ala	210	215	220
Leu	Gly	Ile	Ile	Leu	Ile	Asn	Leu	Cys	Cys	Lys	Arg	Asn	Pro	Trp	Lys	225	230	235
Arg	Ala	Cys	Ser	Gln	Thr	Asp	Gly	Thr	Tyr	Arg	Ser	Tyr	Val	His	Asn	245	250	255
Pro	Ser	Thr	Leu	Leu	Ser	Ile	Leu	Pro	Ile	Ser	Arg	Glu	Leu	Asn	Ser	260	265	270
Leu	Leu	Asn	Arg	Ile	Phe	Asp	Arg	Asn	Pro	Lys	Thr	Arg	Ile	Thr	Leu	275	280	285
Pro	Glu	Leu	Ser	Thr	Leu	Val	Ser	Asn	Cys	Lys	Asn	Leu	Thr	Arg	Arg	290	295	300
Leu	Arg	Pro	Ala	Pro	Leu	Val	Ser	Ser	Arg	Tyr	Leu	Ala	Tyr	Gln	Gln	305	310	315
Gln	Gln	Gln	Gln	Gln	Gln	Met	Asn	Leu	Gln	Gln	Gly	Ile	Gln	Gly	Tyr	325	330	335
Pro	His	Gln	Gly	Tyr	Met	Pro	Thr	Gln	Asn	Ile	Gly	Phe	Pro	Trp	Pro	340	345	350

[illegible]

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<210> 21
<211> 474
<212> PRT
<213> Schizosaccharomyces pombe
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<400> 21
Met Lys Leu Leu Gln Lys Lys Gly Tyr Lys Val Glu Arg Pro Leu Asn
  1                    5                10                15

Lys Gly Ser Tyr Gly Thr Val Val Leu Ala His Arg Leu Phe Arg Thr
                20                25                30

Pro Arg Cys Lys Asp Leu Lys Tyr Ala Ile Lys Cys Ile Lys Lys Pro
          35                40                45

Ala Tyr Thr Phe Leu Gln Glu Val Asn Ile Leu Arg Gln Leu Ser Arg
  50                    55                60

Ser Arg His Arg Asn Ile Ile His Phe Val Glu Ser Phe Glu Asp Asn
  65                70                75                80

Val Tyr Tyr Tyr Val Val Leu Glu Tyr Cys Pro Leu Gly Asp Leu Tyr
                85                90                95

Glu Cys Ile Leu Asn Asn Asp Phe Pro Asn Ala Lys Asn Gln Pro Glu
          100                105                110

Met Ile Lys Asn Ile Phe Leu Gln Ile Ile Asp Gly Val Ala His Leu
          115                120                125

His Ser His Gly Ile Tyr His Arg Asp Leu Lys Pro Glu Asn Phe Leu
          130                135                140

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Leu	Ser	Leu	Ser	Glu	Asp	Gly	Ser	Glu	Leu	Val	Val	Lys	Ile	Ser	Asp	145	150	155	160
Phe	Gly	Leu	Ala	Cys	Arg	Asp	Lys	Ile	Ser	Tyr	Asp	Phe	Gly	Thr	Gly	165	170	175	
Ser	Asp	Arg	Tyr	Met	Ala	Pro	Glu	Gln	Phe	Glu	Glu	Val	Asp	Gly	Ala	180	185	190	
Gly	Tyr	Ser	Pro	Arg	Ala	Ala	Asp	Ile	Trp	Ala	Leu	Gly	Ile	Cys	Leu	195	200	205	
Leu	Asn	Leu	Ile	Phe	Ala	Arg	Asn	Pro	Phe	Thr	Tyr	Pro	His	Glu	Lys	210	215	220	
Asp	Pro	Ile	Phe	Ala	Asp	Tyr	Met	Leu	Asp	Ala	Met	Thr	Leu	Phe	Asp	225	230	235	240
Val	Phe	Pro	Thr	Leu	Ser	Gln	Asp	Thr	Tyr	Asn	Val	Leu	Arg	Ala	Cys	245	250	255	
Leu	Cys	Val	Ser	Pro	Glu	Lys	Arg	Ser	Leu	Ala	Lys	Thr	Arg	Glu	Ala	260	265	270	
Val	Leu	Ala	Val	Thr	Lys	Trp	Thr	Thr	Asp	Asp	Glu	Glu	Leu	Glu	Ser	275	280	285	
Phe	Val	Asn	Glu	Glu	Glu	Glu	Phe	Arg	Ala	Ser	Asp	Phe	Met	Pro	Ala	290	295	300	
Glu	Asp	Asn	Val	Arg	Cys	Thr	Gln	Ser	Asp	Arg	Glu	Pro	Leu	Arg	Thr	305	310	315	320
Pro	Ser	Val	Leu	Thr	Pro	Ala	Asn	Thr	Ile	Gln	Arg	Gly	Leu	Leu	Pro	325	330	335	
Ser	Lys	Leu	Pro	Ala	Leu	Ser	Asp	Val	Asp	Glu	Asn	Ile	Ser	Thr	Ser	340	345	350	
Ser	Ser	Pro	Arg	Ser	Pro	Ala	Ser	Leu	Ala	Pro	Val	Asn	Asn	Ser	Glu	355	360	365	
Arg	Ser	Tyr	Asp	Ser	Gly	Leu	Gly	Glu	Ser	Leu	Asn	Asn	Met	His	Ile	370	375	380	
Gly	Lys	Ser	Ile	Ala	Thr	Ala	Val	Pro	Val	Asn	Thr	Lys	Arg	Ser	Pro	385	390	395	400
Tyr	Ser	Cys	Ser	Ala	Pro	Ala	Ile	Val	Phe	Pro	Asn	Ser	Ile	Lys	Gly	405	410	415	
Asn	Lys	Asp	His	Leu	Lys	Phe	Gly	Arg	Ser	Trp	Cys	Asp	Met	Asp	Glu	420	425	430	
Glu	Asp	Glu	Glu	Asp	Ile	Val	Ser	Phe	Gly	Ser	Asn	Asp	Asp	Phe	Gly	435	440	445	

Ala Ser Asp Glu Leu Ser Ser Lys His Ile Gly Leu Ala Asp Asp Trp  
 450 455 460

Asn Val Leu Ser Gln Trp Asn Asp Asn Ser  
 465 470

<210> 22

<211> 413

<212> PRT

<213> *Pichia jadinii*

<400> 22

Met Thr His Thr Asp Ile Thr Gly Ser Leu Ile Asn Glu Tyr Arg Ile  
 1 5 10 15

Val Lys Leu Ile Gly Ser Gly Ala Tyr Gly Leu Val Tyr Gln Ala Gln  
 20 25 30

Asn Thr Val Thr Gly Gln Gln Val Ala Ile Lys Cys Ile Ser Lys Lys  
 35 40 45

Ser Asn Pro Ser Val Lys Lys Gln Ser Asp Tyr Leu Thr Thr Leu Leu  
 50 55 60

Ala Glu His Leu Leu Glu Arg Asp Phe Ser Leu Gln Gly Leu Arg Glu  
 65 70 75 80

Met Ser Leu Lys Arg Leu Ser Met Ala Asp Asn Ile Pro Cys Pro Phe  
 85 90 95

Val Arg Glu Ile Ser Ile His Leu Gln Val His Gln His Pro Asn Val  
 100 105 110

Ile Ser Ile His Lys Ile Leu Asp Ser Gln Val Ala Val Phe Val Val  
 115 120 125

Met Asp Tyr Tyr Pro Glu Gly Asp Leu Phe Val Asn Ile Val Asp Arg  
 130 135 140

Gln Val Tyr Ala Arg Ser Ser Gly Leu Ile Lys Asp Val Phe Ile Gln  
 145 150 155 160

Leu Ile Asp Val Ile Ser Tyr Cys His Ser Lys Gly Ile Tyr His Cys  
 165 170 175

Asp Ile Lys Pro Glu Asn Ile Met Cys Ala Asn Lys Gly Ser Lys Val  
 180 185 190

Val Ile Gly Asp Phe Gly Leu Ala Val Lys Ser Lys Tyr Ile Gln Ser  
 195 200 205

Lys Thr Cys Ile Gly Ser Ser Tyr Tyr Met Ala Pro Glu Arg Leu Cys  
 210 215 220

Thr Met Asn His Ser Leu Thr Arg Leu Glu Tyr Pro Ala Cys Lys Gly  
 225 230 235 240

Asp Ile Trp Ser Leu Gly Val Ile Leu Ile Asn Phe Cys Cys Thr Arg  
 245 250 255  
 Asn Pro Trp Met Lys Ala Cys Glu Lys Asp Ala Thr Tyr Ser Ala Phe  
 260 265 270  
 Lys Lys Asp Pro Lys Ile Leu Met Glu Ile Leu Asp Ile Ser Glu Glu  
 275 280 285  
 Leu Trp Asn Ile Leu Cys Asp Cys Phe Arg Glu Glu Pro Glu Glu Arg  
 290 295 300  
 Ile Ser Leu Phe Glu Leu Arg Asp Arg Val Leu Lys Cys Arg Ser Phe  
 305 310 315 320  
 Thr Val Ala Gly Pro Leu Ser Arg Cys Asp Ser Tyr Glu Gln Asp Met  
 325 330 335  
 Asp Asp Ala Leu Glu Cys Ala Val Pro Ala Asn Glu Ser Ser Val Gly  
 340 345 350  
 Ser Asn Gly Ser Leu Asp Leu Pro Met Asp His Ile Ile Glu Tyr Ala  
 355 360 365  
 Gln Tyr Leu Gln Thr Leu Ser Ser Val Lys Asn Thr Ala Ala Gly Asn  
 370 375 380  
 Tyr Thr Gln Asn Gln Phe Val Leu Asp Asn Asn Ile Met Asp Asn Val  
 385 390 395 400  
 Ser Ile Met Ser Asn Lys Ser Phe Asn Met Asn Phe Ala  
 405 410

<210> 23

<211> 506

<212> PRT

<213> Nectria haematococca

<400> 23

Met Gln His His Ala Ile Phe Gly Tyr Gln Thr Pro Pro Ala Ser Pro  
 1 5 10 15  
 Gly Phe Asp Asn Pro Lys Cys Thr Ile Gln Gln Pro Phe Ala Val Pro  
 20 25 30  
 Arg His Tyr Pro Thr Arg Pro Leu Ala Pro Glu Glu Arg Leu Gly Arg  
 35 40 45  
 Val Leu Glu Gly Thr Leu Gln Leu Thr Glu Ile Leu Gly Thr Gly Ala  
 50 55 60  
 Tyr Gly Val Val Tyr Leu Ala Val Asp Leu Lys Thr Gly Gly Lys Tyr  
 65 70 75 80  
 Ala Val Lys Cys Leu Ser Lys Phe Asn Ala Asp Gly Thr Gln Leu Glu  
 85 90 95

Pro	Arg	Gln	Phe	Ala	Tyr	Gln	Gln	Arg	Glu	Ile	Arg	Leu	His	Trp	Lys	100	105	110
Ala	Ser	Asn	His	Ala	Asn	Val	Val	Gln	Met	Leu	Lys	Ile	Val	Asn	Asp	115	120	125
Pro	Asp	Cys	Ile	Tyr	Val	Ile	Leu	Glu	Tyr	Cys	Pro	Glu	Gly	Asp	Leu	130	135	140
Phe	Leu	Asn	Ile	Thr	Glu	Arg	Gly	Gln	Tyr	Val	Gly	Lys	Asp	Glu	Leu	145	150	155
Ser	Arg	Asn	Ile	Phe	Leu	Gln	Ile	Leu	Asp	Ala	Val	Glu	His	Cys	His	165	170	175
Asn	Leu	Gly	Ile	Tyr	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Leu	Val	180	185	190
Thr	Asp	Arg	Gly	Asp	Thr	Val	Lys	Leu	Ala	Asp	Phe	Gly	Leu	Ala	Thr	195	200	205
Ser	Asp	Asp	Arg	Ser	Glu	Asp	Tyr	Gly	Cys	Gly	Ser	Thr	Phe	Tyr	Met	210	215	220
Ser	Pro	Glu	Cys	Leu	Asp	Pro	Ser	Ala	Arg	Lys	Pro	Tyr	Tyr	Met	Cys	225	230	235
Ala	Pro	Asn	Asp	Val	Trp	Ser	Leu	Gly	Val	Ile	Leu	Val	Asn	Leu	Thr	245	250	255
Cys	Gly	Arg	Asn	Pro	Trp	Lys	Gln	Ala	Ser	Phe	Gln	Asp	Ser	Thr	Tyr	260	265	270
Arg	Ala	Tyr	Ala	Gly	Ser	Lys	Asp	Phe	Leu	Lys	Thr	Ile	Leu	Pro	Leu	275	280	285
Ser	Asp	Glu	Leu	Asn	Glu	Ile	Leu	Gly	Arg	Ile	Phe	Glu	Pro	Asn	Pro	290	295	300
Glu	Gln	Arg	Ile	Thr	Leu	Asn	Glu	Leu	Arg	Thr	Arg	Ile	Met	Ala	Cys	305	310	315
Ser	Arg	Phe	Thr	Met	Pro	Ala	Val	Ser	Pro	Pro	Thr	Pro	Pro	Ala	Ser	325	330	335
Pro	Asp	His	Thr	Thr	Gln	Tyr	Val	Ser	Thr	Glu	Asp	Ala	Ile	Ile	Asp	340	345	350
Asp	Tyr	Asp	Tyr	Asp	Ser	Pro	Leu	Ser	Pro	Ala	Ser	Ser	Ser	Asp	Asp	355	360	365
Glu	Gly	Ser	Leu	Thr	Ser	Ser	Gly	Ser	Thr	Ile	Asp	Asp	Leu	Asp	Asp	370	375	380
Asp	Phe	Asp	Gln	Glu	Arg	Gln	Met	Pro	Gln	Thr	Pro	Pro	Glu	Tyr	Ala	385	390	395
																		400

Pro His Ala Phe Asp Pro Glu Glu Pro Lys Glu His Gln Leu Ile Tyr  
 405 410 415

His Ser Gln Glu Phe Val Pro Gln Lys Tyr Ser Gly Pro Val Pro Val  
 420 425 430

Pro Val Gln Val Pro Val Gly Val Pro Pro Gln Pro Met Leu Cys Gln  
 435 440 445

Pro Val Pro Val Pro Ile Gln Ala Pro Val Pro Ile Gln Ala Pro Cys  
 450 455 460

Gln Gln His Lys Ser Tyr Phe Pro Ile Trp Asp Met Val Lys Tyr Val  
 465 470 475 480

Gln His Val Pro Ile Leu Gln His His Ile Pro Phe His Gln Gln Val  
 485 490 495

Pro Phe Met Pro Thr Phe Gln Gly Cys Tyr  
 500 505

<210> 24  
 <211> 315  
 <212> PRT  
 <213> Candida albicans

<400> 24  
 Asp Leu Cys Tyr Ala Asn Ser Ile Ile Asp Tyr Asn Glu Leu His Leu  
 1 5 10 15

Val Leu Ile Asp Phe Gly Leu Ala Met Asp Ser Ala Thr Ile Cys Cys  
 20 25 30

Asn Ser Cys Arg Gly Ser Ser Phe Tyr Met Ala Pro Glu Arg Thr Thr  
 35 40 45

Asn Tyr Asn Thr His Arg Leu Ile Asn Gln Leu Ile Asp Met Asn Gln  
 50 55 60

Tyr Glu Ser Ile Glu Ile Asn Gly Thr Thr Val Thr Lys Ser Asn Cys  
 65 70 75 80

Lys Tyr Leu Pro Thr Leu Ala Gly Asp Ile Trp Ser Leu Gly Val Leu  
 85 90 95

Phe Ile Asn Ile Thr Cys Ser Arg Asn Pro Trp Pro Ile Ala Ser Phe  
 100 105 110

Asp Asn Asn Gln Asn Asn Glu Val Phe Lys Asn Tyr Met Leu Asn Asn  
 115 120 125

Asn Lys Ala Val Leu Ser Lys Ile Leu Pro Ile Ser Ser Gln Phe Asn  
 130 135 140

Arg Leu Leu Asp Arg Ile Phe Lys Leu Asn Pro Asn Asp Arg Ile Asp  
 145 150 155 160

Leu	Pro	Thr	Leu	Tyr	Lys	Glu	Val	Ile	Arg	Cys	Asp	Phe	Phe	Lys	Asp
				165					170					175	
Asp	His	Tyr	Tyr	Tyr	Ala	Gln	His	Gln	His	His	His	Asn	His	Asn	Gln
				180				185					190		
Ile	Asn	Asn	Ala	Tyr	Asn	His	Tyr	Gln	Lys	Gln	Pro	Asn	Gln	Ala	Arg
				195			200					205			
Pro	Thr	Ala	Asn	Gln	Gln	Leu	Tyr	Thr	Pro	Pro	Glu	Thr	Thr	Thr	Tyr
				210		215					220				
Asn	Ser	Tyr	Ala	Ser	Asp	Met	Glu	Glu	Asp	Glu	Ile	Ser	Asp	Asp	Glu
				225		230				235					240
Phe	Tyr	Ser	Asp	Glu	Glu	Asp	Glu	Asp	Ile	Glu	Asp	Tyr	Glu	Glu	Glu
				245					250					255	
Glu	Glu	Glu	Tyr	Phe	Gly	Asn	Glu	Gln	Gln	Gln	Gln	Gln	Gln	Val	Thr
				260				265					270		
Thr	Val	Asn	Gly	Asn	Phe	Gly	Gln	Val	Lys	Gly	Thr	Cys	Tyr	Tyr	Asp
				275			280					285			
Thr	Lys	Thr	Lys	Thr	Thr	Thr	Tyr	Ile	Lys	Pro	Pro	Ala	Ala	Tyr	Thr
				290		295					300				
Leu	Glu	Thr	Pro	Ser	Gln	Ser	Val	Glu	Tyr	Cys					
				305		310				315					

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<210> 25
<211> 640
<212> PRT
<213> Saccharomyces cerevisiae
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<400> 25
Met Ser Pro Arg Gln Leu Ile Pro Thr Leu Ile Pro Glu Trp Ala Pro
  1                      5                      10                      15

Leu Ser Gln Gln Ser Cys Ile Arg Glu Asp Glu Leu Asp Ser Pro Pro
                20                      25                      30

Ile Thr Pro Thr Ser Gln Thr Ser Ser Phe Gly Ser Ser Phe Ser Gln
          35                      40                      45

Gln Lys Pro Thr Tyr Ser Thr Ile Ile Gly Glu Asn Ile His Thr Ile
      50                      55                      60

Leu Asp Glu Ile Arg Pro Tyr Val Lys Lys Ile Thr Val Ser Asp Gln
  65                      70                      75                      80

Asp Lys Lys Thr Ile Asn Gln Tyr Thr Leu Gly Val Ser Ala Gly Ser
                85                      90                      95

Gly Gln Phe Gly Tyr Val Arg Lys Ala Tyr Ser Ser Thr Leu Gly Lys
      100                      105                      110

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Val	Val	Ala	Val	Lys	Ile	Ile	Pro	Lys	Lys	Pro	Trp	Asn	Ala	Gln	Gln		
		115					120					125					
Tyr	Ser	Val	Asn	Gln	Val	Met	Arg	Gln	Ile	Gln	Leu	Trp	Lys	Ser	Lys		
		130				135					140						
Gly	Lys	Ile	Thr	Thr	Asn	Met	Ser	Gly	Asn	Glu	Ala	Met	Arg	Leu	Met		
145					150					155					160		
Asn	Ile	Glu	Lys	Cys	Arg	Trp	Glu	Ile	Phe	Ala	Ala	Ser	Arg	Leu	Arg		
				165					170						175		
Asn	Asn	Val	His	Ile	Val	Arg	Leu	Ile	Glu	Cys	Leu	Asp	Ser	Pro	Phe		
			180					185					190				
Ser	Glu	Ser	Ile	Trp	Ile	Val	Thr	Asn	Trp	Cys	Ser	Leu	Gly	Glu	Leu		
		195					200						205				
Gln	Trp	Lys	Arg	Asp	Asp	Asp	Glu	Asp	Ile	Leu	Pro	Gln	Trp	Lys	Lys		
		210				215					220						
Ile	Val	Ile	Ser	Asn	Cys	Ser	Val	Ser	Thr	Phe	Ala	Lys	Lys	Ile	Leu		
225					230					235					240		
Glu	Asp	Met	Thr	Lys	Gly	Leu	Glu	Tyr	Leu	His	Ser	Gln	Gly	Cys	Ile		
				245					250					255			
His	Arg	Asp	Ile	Lys	Pro	Ser	Asn	Ile	Leu	Leu	Asp	Glu	Glu	Glu	Lys		
			260					265					270				
Val	Ala	Lys	Leu	Ser	Asp	Phe	Gly	Ser	Cys	Ile	Phe	Thr	Pro	Gln	Ser		
		275					280					285					
Leu	Pro	Phe	Ser	Asp	Ala	Asn	Phe	Glu	Asp	Cys	Phe	Gln	Arg	Glu	Leu		
		290				295					300						
Asn	Lys	Ile	Val	Gly	Thr	Pro	Ala	Phe	Ile	Ala	Pro	Glu	Leu	Cys	His		
305					310					315					320		
Leu	Gly	Asn	Ser	Lys	Arg	Asp	Phe	Val	Thr	Asp	Gly	Phe	Lys	Leu	Asp		
				325					330					335			
Ile	Trp	Ser	Leu	Gly	Val	Thr	Leu	Tyr	Cys	Leu	Leu	Tyr	Asn	Glu	Leu		
			340					345					350				
Pro	Phe	Phe	Gly	Glu	Asn	Glu	Phe	Glu	Thr	Tyr	His	Lys	Ile	Ile	Glu		
		355					360					365					
Val	Ser	Leu	Ser	Ser	Lys	Ile	Asn	Gly	Asn	Thr	Leu	Asn	Asp	Leu	Val		
		370				375					380						
Ile	Lys	Arg	Leu	Leu	Glu	Lys	Asp	Val	Thr	Leu	Arg	Ile	Ser	Ile	Gln		
385					390					395					400		
Asp	Leu	Val	Lys	Val	Leu	Ser	Arg	Asp	Gln	Pro	Ile	Asp	Ser	Arg	Asn		
				405					410					415			

His Ser Gln Ile Ser Ser Ser Ser Val Asn Pro Val Arg Asn Glu Gly  
 420 425 430  
 Pro Val Arg Arg Phe Phe Gly Arg Leu Leu Thr Lys Lys Gly Lys Lys  
 435 440 445  
 Lys Thr Ser Gly Lys Gly Lys Asp Lys Val Leu Val Ser Ala Thr Ser  
 450 455 460  
 Lys Val Thr Pro Ser Ile His Ile Asp Glu Glu Pro Asp Lys Glu Cys  
 465 470 475 480  
 Phe Ser Thr Thr Val Leu Arg Ser Ser Pro Asp Ser Ser Asp Tyr Cys  
 485 490 495  
 Ser Ser Leu Gly Glu Glu Ala Ile Gln Val Thr Asp Phe Leu Asp Thr  
 500 505 510  
 Phe Cys Arg Ser Asn Glu Ser Leu Pro Asn Leu Thr Val Asn Asn Asp  
 515 520 525  
 Lys Gln Asn Ser Asp Met Lys Thr Asp Arg Ser Glu Ser Ser Ser His  
 530 535 540  
 Ser Ser Leu Lys Ile Pro Thr Pro Ile Lys Ala Met Ile Arg Leu Lys  
 545 550 555 560  
 Ser Ser Pro Lys Glu Asn Gly Asn Arg Thr His Ile Asn Cys Ser Gln  
 565 570 575  
 Asp Lys Pro Ser Ser Pro Leu Met Asp Arg Thr Val Gly Lys Arg Thr  
 580 585 590  
 Val Asn Asn Ser Gly Ala Arg Lys Leu Ala His Ser Ser Asn Ile Leu  
 595 600 605  
 Asn Phe Lys Ala Tyr Ile Asn Ser Glu Asp Ser Asp Ile Arg Glu Thr  
 610 615 620  
 Val Glu Asp Val Lys Thr Tyr Leu Asn Phe Ala Asp Asn Gly Gln Ile  
 625 630 635 640

&lt;210&gt; 26

&lt;211&gt; 1142

&lt;212&gt; PRT

<213> *Saccharomyces cerevisiae*

&lt;400&gt; 26

Met Asp Arg Ser Asp Lys Lys Val Asn Val Glu Glu Val Asn Val Pro  
 1 5 10 15  
 Ser Asn Leu Gln Ile Glu Leu Glu Lys Ser Gly Thr Ser Ser Ser Val  
 20 25 30  
 Ser Leu Arg Ser Pro Thr Lys Ser Ser Ala Thr Asn Leu Ala Gly Met  
 35 40 45



Ala	Glu	Gly	Ala	Arg	Asp	Asn	Ala	Ser	Ile	Ala	Ser	Ser	Ser	Val	Asp	50	55	60
Ser	Leu	Asn	Met	Leu	Leu	Glu	Arg	Gln	Arg	Val	Arg	Gln	Leu	Asn	His	65	70	75
Pro	Gln	His	Gln	Gln	His	Ile	Ser	Ser	Ser	Leu	Ala	Lys	Thr	Pro	Thr	85	90	95
Thr	Thr	Ser	Ser	Phe	Cys	Ser	Ser	Gly	Ser	Ser	Lys	Asn	Lys	Val	Lys	100	105	110
Glu	Thr	Asn	Arg	Ile	Ser	Leu	Thr	Tyr	Asp	Pro	Val	Ser	Lys	Arg	Lys	115	120	125
Val	Leu	Asn	Thr	Tyr	Glu	Ile	Ile	Lys	Glu	Leu	Gly	His	Gly	Gln	His	130	135	140
Gly	Lys	Val	Lys	Leu	Ala	Arg	Asp	Ile	Leu	Ser	Lys	Gln	Leu	Val	Ala	145	150	155
Ile	Lys	Ile	Val	Asp	Arg	His	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Phe	Thr	165	170	175
Phe	Ile	Lys	Ser	Ser	Lys	Ile	Ser	Glu	Asn	Asp	Lys	Ile	Lys	Arg	Glu	180	185	190
Ile	Ala	Ile	Met	Lys	Lys	Cys	His	His	Lys	His	Val	Val	Gln	Leu	Ile	195	200	205
Glu	Val	Leu	Asp	Asp	Leu	Lys	Ser	Arg	Lys	Ile	Tyr	Leu	Val	Leu	Glu	210	215	220
Tyr	Cys	Ser	Arg	Gly	Glu	Val	Lys	Trp	Cys	Pro	Pro	Asp	Cys	Met	Glu	225	230	235
Ser	Asp	Ala	Lys	Gly	Pro	Ser	Leu	Leu	Ser	Phe	Gln	Glu	Thr	Arg	Glu	245	250	255
Ile	Leu	Arg	Gly	Val	Val	Leu	Gly	Leu	Glu	Tyr	Leu	His	Tyr	Gln	Gly	260	265	270
Ile	Ile	His	Arg	Asp	Ile	Lys	Pro	Ala	Asn	Leu	Leu	Ile	Ser	Gly	Asp	275	280	285
Gly	Thr	Val	Lys	Ile	Ser	Asp	Phe	Gly	Val	Ser	Leu	Ala	Ala	Ser	Ser	290	295	300
Thr	Asn	Ser	Ser	Asp	Ser	Ser	Glu	Ser	Leu	Asp	Glu	Leu	Glu	Leu	Ala	305	310	315
Lys	Thr	Val	Gly	Thr	Pro	Ala	Phe	Phe	Ala	Pro	Glu	Met	Cys	Leu	Gly	325	330	335
Glu	Asp	Ala	Phe	Thr	Arg	Tyr	Asn	Leu	Thr	Lys	Glu	Asn	Leu	Phe	Arg	340	345	350

Gly	Ser	Cys	Ile	Ser	Phe	Met	Ile	Asp	Ile	Trp	Ala	Val	Gly	Val	Thr	355	360	365
Leu	Tyr	Cys	Leu	Leu	Phe	Gly	Met	Leu	Pro	Phe	Phe	Ser	Asp	Phe	Glu	370	375	380
Leu	Lys	Leu	Phe	Glu	Lys	Ile	Val	Asn	Asp	Pro	Leu	Lys	Phe	Pro	Thr	385	390	395
Phe	Lys	Glu	Ile	Gln	Ser	Asn	Lys	Val	Ser	Lys	Val	Ser	Cys	Glu	Glu	405	410	415
Glu	Tyr	Glu	Met	Ala	Lys	Asp	Leu	Leu	Leu	Lys	Leu	Leu	Glu	Lys	Asn	420	425	430
Pro	Gln	Lys	Arg	Met	Thr	Ile	Pro	Ala	Ile	Lys	Lys	His	Pro	Phe	Val	435	440	445
Ser	Trp	Asp	Phe	Asp	His	Val	Pro	Glu	Asn	Asp	Glu	Lys	Leu	Leu	Ser	450	455	460
Ser	Val	Leu	Glu	Gln	Lys	Leu	Arg	Phe	Gln	Cys	Asn	Gln	Thr	Asp	Gln	465	470	475
Phe	Glu	Pro	Ile	Ser	Ile	Ser	Lys	His	Glu	Leu	Lys	Asn	Ala	Val	Ser	485	490	495
Gly	Val	Gly	Lys	Lys	Ile	Lys	Glu	Ser	Val	Leu	Lys	Ser	Ile	Pro	Leu	500	505	510
Lys	Asp	Pro	Ser	Asp	Leu	Ser	Asn	Lys	Asn	Tyr	Leu	His	Pro	Thr	Glu	515	520	525
Thr	Thr	Arg	Gly	Arg	Gly	Asp	Ala	Asn	Val	Ile	Val	Ser	Glu	Gly	Ser	530	535	540
Val	Leu	Ser	Asn	Ile	Lys	Glu	Leu	Ser	Ala	Asn	Asp	Gly	Cys	Leu	Asn	545	550	555
Thr	Asp	Ser	Asp	Thr	Asn	Ile	Asn	Ile	Asn	Asp	Asp	Asp	His	Tyr	Ser	565	570	575
Gly	Asp	Asp	Asn	Asp	Gly	His	Leu	Thr	Lys	Arg	Glu	Leu	Glu	Arg	Glu	580	585	590
Leu	Asn	Lys	Phe	Asp	Asp	Lys	His	Glu	Ala	Gly	Asn	Met	Val	Asn	Leu	595	600	605
Pro	Ile	Asn	Ser	Ser	Phe	Ala	Ser	Leu	Asp	Ser	Phe	Tyr	Ile	Asp	Asn	610	615	620
Phe	Ala	Met	Ala	Arg	Met	Gly	Met	Ser	Ser	Pro	Glu	Ala	Gly	Asp	Ser	625	630	635
Val	Ser	Ser	Val	Pro	Asn	Leu	Pro	Ser	Ala	Pro	Ser	Ser	Thr	Arg	Leu	645	650	655

Gly	Arg	Ser	Pro	Val	Phe	Ser	Gly	Val	Thr	Asn	Gln	Pro	Ser	Pro	Ile
			660					665					670		
Arg	Pro	Val	Leu	Pro	Gln	Gln	Lys	Ser	Ser	Phe	Cys	Ala	Thr	Gly	Arg
		675					680					685			
Tyr	Asp	Lys	Ser	His	Asn	Ser	Leu	Leu	Arg	Asn	Ser	Ser	Ser	His	Leu
	690					695					700				
Thr	Ser	Tyr	Asn	Ser	Gly	Arg	Pro	Ser	Ser	Arg	Thr	Gly	Arg	Met	Asn
705					710					715					720
Ser	Arg	Asn	Gln	Asn	Leu	Pro	Lys	Ile	Pro	Asn	Ser	Leu	Ser	Lys	Ile
				725					730					735	
Ser	Thr	Thr	Lys	Leu	Thr	Glu	Leu	Arg	Val	Pro	Lys	Asp	Ser	Glu	Ile
			740					745					750		
Pro	Ser	Pro	Ala	Lys	Asn	Pro	Asn	Ala	Asp	Arg	Leu	Arg	Arg	Phe	Pro
		755					760					765			
Val	Lys	Lys	Asn	Thr	Lys	Thr	Pro	Ala	Ile	Lys	Asp	Pro	Pro	Arg	Ile
	770					775					780				
Asn	Ile	Asn	Ser	Ser	Asp	Lys	Ser	Gly	Ser	Lys	Asn	Ser	Pro	Ile	Lys
785					790					795					800
Ser	Leu	Tyr	Gln	Arg	Met	Lys	Gln	Ser	Lys	Asp	Asn	Ser	Lys	Thr	Phe
				805					810					815	
Glu	Val	Arg	Arg	Gly	Asn	Phe	Phe	Ser	His	Phe	Asn	Gly	Asp	Asp	Asp
			820					825					830		
Asp	Ser	Ser	Ser	Gln	Ser	Ser	Val	Thr	Ser	Ser	Gly	Ser	Glu	Ser	Asp
		835					840					845			
Ser	Glu	Leu	Ser	Ser	Thr	Ser	Ser	Ser	Cys	Thr	Ser	Gly	Thr	Gln	Ser
	850					855					860				
Arg	Asn	Ser	Ser	Asn	Asn	Asn	Ala	Tyr	Ser	Glu	Thr	Glu	Ser	Leu	Pro
865					870					875					880
Phe	Glu	Phe	Gly	Val	Asp	Ser	Glu	Asp	Gly	Ser	Gly	Val	Leu	Leu	Arg
				885					890					895	
Asp	Leu	Pro	Asn	Glu	Asp	Gln	Ile	Arg	Pro	Phe	Leu	Asp	Ile	Gln	Pro
			900					905					910		
Cys	Arg	Arg	Met	Lys	Val	Lys	Ser	Ser	Leu	Asn	Leu	Glu	Pro	Pro	Ser
		915					920					925			
Val	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asp	Glu	Asp	Glu	Leu	Ile	Leu
	930					935					940				
Asn	Val	Gly	Thr	Ala	Gly	His	Arg	Arg	Arg	His	Asn	Ser	Ser	Lys	Leu
945					950					955					960

Ser	Glu	Leu	Ser	Asn	Ser	Pro	Gln	Lys	Gly	Ser	Asn	Asn	Phe	Met	Tyr	
				965					970					975		
Ser	Asn	Gly	Ser	Val	His	Asp	Ser	Glu	Thr	Thr	Ile	Thr	Pro	Gln	Asn	
				980					985					990		
Met	Asp	Asp	Leu	Thr	Leu	His	Gln	Ala	Leu	Ser	Arg	Ser	Gln	Pro	Ile	
				995					1000					1005		
Ser	Lys	Pro	Gly	Pro	Leu	Val	Leu	Pro	Lys	Arg	Leu	Asp	Gln	Lys	Lys	
				1010					1015					1020		
Ala	Thr	Thr	Glu	Thr	Ser	Asn	Leu	Thr	Asp	Ile	Val	Glu	Phe	Asn	Gly	
				1025					1030					1035		
Asn	Asn	Asp	His	Arg	Lys	Asp	Lys	Asn	Phe	Asp	Lys	Val	Leu	Tyr	Ser	
				1045					1050					1055		
Arg	Asp	Leu	Leu	Lys	Asp	Ala	Leu	Ser	Ser	Thr	Asn	Ala	Gly	Arg	Arg	
				1060					1065					1070		
Arg	Ser	Ile	Pro	Ser	Asn	Lys	Ile	Arg	Gly	Arg	Lys	Asp	Ala	Ser	Ile	
				1075					1080					1085		
Thr	Met	Ser	Thr	Asn	Val	Gly	Asn	Asp	Glu	His	Ala	Arg	Asn	Thr	Ser	
				1090					1095					1100		
Cys	His	Gly	Asp	Lys	Gly	Gln	Glu	Asn	Gly	Ala	Ile	Lys	Gln	Arg	Thr	
				1105					1110					1115		
His	Glu	Arg	Ser	Arg	Ser	Leu	Thr	Val	Ala	Glu	Leu	Asn	Glu	Glu	Lys	
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Arg	Arg	Ser	Ala	Leu	Pro											
				1140												

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<210> 27
<211> 559
<212> PRT
<213> Saccharomyces cerevisiae
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<400> 27
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  1          5          10          15

Leu Tyr Asn Asn Ala Ser Asn Ser Ser Ser Arg Ile Lys Glu Thr Arg
          20          25          30

Lys Val Lys Leu Leu Tyr Asn Pro Leu Thr Lys Arg Gln Ile Leu Asn
      35          40          45

Asn Phe Glu Ile Leu Ala Thr Leu Gly Asn Gly Gln Tyr Gly Lys Val
      50          55          60

Lys Leu Ala Arg Asp Leu Gly Thr Gly Ala Leu Val Ala Ile Lys Ile
  65          70          75          80

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Leu Asn Arg Phe Glu Lys Arg Ser Gly Tyr Ser Leu Gln Leu Lys Val  
                             85  90  95  
 Glu Asn Pro Arg Val Asn Gln Glu Ile Glu Val Met Lys Arg Cys His  
                             100  105  110  
 His Glu Asn Val Val Glu Leu Tyr Glu Ile Leu Asn Asp Pro Glu Ser  
                             115  120  125  
 Thr Lys Val Tyr Leu Val Leu Glu Tyr Cys Ser Arg Gly Pro Val Lys  
                             130  135  140  
 Trp Cys Pro Glu Asn Lys Met Glu Ile Lys Ala Val Gly Pro Ser Ile  
                             145  150  155  160  
 Leu Thr Phe Gln Gln Ser Arg Lys Val Val Leu Asp Val Val Ser Gly  
                             165  170  175  
 Leu Glu Tyr Leu His Ser Gln Gly Ile Thr His Arg Asp Ile Lys Pro  
                             180  185  190  
 Ser Asn Leu Leu Ile Ser Ser Asn Gly Thr Val Lys Ile Ser Asp Phe  
                             195  200  205  
 Gly Val Ala Met Ser Thr Ala Thr Gly Ser Thr Asn Ile Gln Ser Ser  
                             210  215  220  
 His Glu Gln Leu Leu Lys Ser Arg Ala Leu Gly Thr Pro Ala Phe Phe  
                             225  230  235  240  
 Ala Pro Glu Leu Cys Ser Thr Glu Lys Glu Tyr Ser Cys Ser Thr His  
                             245  250  255  
 Glu Ile Trp Ser Leu Gly Val Thr Ile Tyr Cys Leu Leu Phe Gly Lys  
                             260  265  270  
 Leu Pro Phe Asn Ala Asn Ser Gly Leu Glu Leu Phe Asp Ser Ile Ile  
                             275  280  285  
 Asn Lys Pro Leu Glu Phe Pro Ser Tyr Glu Glu Met Leu Asn Gly Ala  
                             290  295  300  
 Thr Ser Gly Ile Thr Met Glu Glu Tyr Thr Asp Ala Lys Asp Leu Leu  
                             305  310  315  320  
 Lys Lys Leu Leu Gln Lys Asp Pro Asp Lys Arg Ile Lys Leu Ala Asp  
                             325  330  335  
 Ile Lys Val His Pro Phe Met Cys His Tyr Gly Lys Ser Asp Ala Ala  
                             340  345  350  
 Ser Val Leu Thr Asn Leu Glu Thr Phe His Glu Leu Lys Val Ser Pro  
                             355  360  365  
 Pro Ser Ser Cys Lys Arg Val Glu Leu Val Ser Leu Pro Val Asn Ser  
                             370  375  380

Ser Phe Ala Ser Leu Asp Ser Val Tyr Met Glu Asn Phe Asp His Asn  
 385 390 395 400  
 Asn Leu Arg Thr Gly Ala Asp Arg Asn Ser Thr Tyr Ser Pro Ser Ile  
 405 410 415  
 Tyr Asp Ala Asn Thr Leu Ser Pro Ser Ala Tyr His Asn Ile Gly Ser  
 420 425 430  
 Arg Glu Ser Ser Tyr Ser Ser Phe Ser Ser Phe Thr Ser Ser Thr Ala  
 435 440 445  
 Phe Ala Ser Gln Ile Ser Ile Gln Asp Ala Pro Ala Ile Gly Asp Gln  
 450 455 460  
 Gln Cys Leu Ile Gly Glu Ser Gly Ser Ser Leu Arg Val Asn Ser Cys  
 465 470 475 480  
 Glu Phe Pro Gln Tyr Thr Thr Met Ser Pro Val Gly Glu Tyr Pro Phe  
 485 490 495  
 Glu Ser Thr Glu Ala Ser Leu Ser Ser Thr Leu Thr Pro Val Gly Asn  
 500 505 510  
 Val Pro Gln Arg Ile Lys Ala His Leu Val Glu Gly Lys Ser Asn Ser  
 515 520 525  
 Lys Asp Asp Leu Arg Ile Glu Ala Asp Ala Ser Leu Val Phe Glu Ala  
 530 535 540  
 Ser Asp Ala Gln Arg Thr Arg Arg Arg Met Ser Leu Tyr Lys Leu  
 545 550 555

<210> 28  
 <211> 652  
 <212> PRT  
 <213> Schizosaccharomyces pombe

<400> 28  
 Met Gly Ser Val Asn Asn Glu Glu Lys Thr Leu Ile Glu Pro Gln Arg  
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 Leu Leu Arg Lys Asn Thr Trp His Pro Glu Val Asp Asp Ser Glu Val  
 20 25 30  
 Pro Pro Ser Val Phe Pro Glu Tyr Pro Val His Lys Ala Ile Gln Lys  
 35 40 45  
 Thr Ser Asp Ser Phe Arg Lys Arg Asn Tyr Ser Ala Gly Asp Tyr Val  
 50 55 60  
 Ile Ala Pro Leu Gly Gly Glu Arg Glu Gly Ser Ser Leu Thr His Ser  
 65 70 75 80  
 Trp Thr Phe Gln Pro Gly Lys His Asn Gln Arg Leu Tyr Ser Asp Asn  
 85 90 95

Phe	Gln	Glu	Ala	Gln	Arg	Gln	Trp	Lys	Arg	Leu	Gln	Glu	Trp	Gly	Glu		
			100					105					110				
Val	Lys	Glu	Thr	Lys	Lys	Ile	Arg	Lys	Arg	Phe	Asp	Arg	Phe	Ser	Gly		
		115					120					125					
Arg	Lys	Tyr	Ile	Asn	His	Tyr	Glu	Ile	Ile	Lys	Glu	Leu	Gly	Arg	Gly		
	130					135					140						
Met	His	Gly	Lys	Val	Lys	Leu	Gly	Arg	Asp	Thr	Val	Thr	Arg	Glu	Leu		
145					150					155					160		
Leu	Ala	Ile	Lys	Ile	Ile	Pro	Lys	Thr	Glu	Arg	Arg	Pro	Lys	Leu	Gly		
				165					170					175			
Arg	Ala	Asn	Ala	Ser	Ser	Gln	Lys	Glu	Lys	Val	Arg	Arg	Glu	Ile	Ala		
			180					185					190				
Ile	Leu	Lys	Lys	Cys	Val	His	Pro	Asn	Val	Val	Arg	Leu	Arg	Glu	Val		
		195					200					205					
Ile	Asp	Asp	Pro	Ser	Ser	Thr	Lys	Val	Tyr	Leu	Val	Leu	Glu	Tyr	Met		
	210					215					220						
Ser	Gly	Gly	Glu	Val	Pro	Trp	Thr	Asp	Cys	Asp	Ser	Pro	Val	Leu	Ser		
225					230					235					240		
Ile	Ser	Glu	Ala	Arg	Gln	Tyr	Phe	Arg	Asp	Val	Val	Leu	Gly	Leu	Glu		
			245						250					255			
Tyr	Leu	His	Tyr	Gln	Gly	Ile	Ile	His	Arg	Asp	Ile	Lys	Pro	Ala	Asn		
			260					265					270				
Leu	Leu	Leu	Asn	Ser	Ser	Asn	Cys	Val	Lys	Ile	Ser	Asp	Phe	Gly	Val		
		275					280					285					
Ser	Tyr	Ile	Ala	Asn	Ala	Gly	Leu	Asn	Glu	Asp	Asn	Asp	Val	Glu	Leu		
	290					295					300						
Ala	Lys	Thr	Val	Gly	Thr	Pro	Ala	Phe	Phe	Ala	Pro	Glu	Leu	Cys	Trp		
305					310					315					320		
Thr	Asp	Leu	Asp	Arg	Pro	Arg	Pro	Lys	Ile	Ser	Glu	Ala	Ile	Asp	Val		
				325					330					335			
Trp	Ala	Leu	Gly	Val	Thr	Leu	Phe	Cys	Leu	Leu	Phe	Gly	Arg	Cys	Pro		
			340					345					350				
Phe	Asn	Ala	Ser	Met	Glu	Tyr	Glu	Leu	Phe	Asp	Lys	Ile	Val	Asn	Glu		
		355					360					365					
Arg	Leu	Asn	Ile	Pro	Ser	Thr	Pro	Asp	Ile	Gly	Glu	Glu	Gly	Arg	Asp		
	370					375					380						
Leu	Leu	Lys	Arg	Leu	Leu	Cys	Lys	Asp	Pro	Glu	Gln	Arg	Ile	Thr	Leu		
385					390					395					400		

Val Glu Val Lys Leu His Pro Trp Thr Leu Asp Gly Leu Lys Asp Pro  
 405 410 415  
 Glu Lys Trp Leu Gln Asn Thr Asp Pro Ser Thr Val Ser Arg Val Glu  
 420 425 430  
 Val Ser Thr Asp Glu Val Ala Ser Ala Ile Ser Leu Val Gly Arg Leu  
 435 440 445  
 Arg Arg Lys Leu Gly Lys Leu Phe Arg Phe Arg Arg Pro Lys Ala Arg  
 450 455 460  
 Val Phe Asp Ser Ser Ser Ser Val Pro Ser Asp Ser Ser Ile Cys Arg  
 465 470 475 480  
 Pro Glu Ser Ser Gly Asn Ser Ser Ile Gly Leu Ser Ala Ser Glu Leu  
 485 490 495  
 Ser Asp Ser Phe Asn Arg Leu Ala Val Asn Glu Ser Gln Lys Asp Arg  
 500 505 510  
 Glu Arg Lys Gln Val His Pro Val Glu Met Gly Arg Asn Ser Ser Glu  
 515 520 525  
 Lys Lys Pro Arg Cys Asp Phe Gly Trp Asp Tyr Glu Ala Phe Pro Asn  
 530 535 540  
 Asp Asn Gln Asp Ala Asp Asp Ala Cys Ser Tyr Asn Thr Gly Asp Ser  
 545 550 555 560  
 Ile Pro Gln Val Ser Lys Ser Ile Asn Gly His Phe Glu Thr Tyr Ser  
 565 570 575  
 Arg Thr Ser Met Asp Thr Asp Asp Val Ala Ser Phe Glu Ser Pro Asn  
 580 585 590  
 Ala Lys His Glu Glu Ser Gly Met Pro Val Val Thr Phe Arg Asn Tyr  
 595 600 605  
 Glu Asn Tyr Asp Ala Asn Pro Ser Asn Phe His Pro Val Val Pro Gly  
 610 615 620  
 Phe Val Ser Ser Pro Asn Leu His Leu Ala Gly Gly Ser Asp Thr Pro  
 625 630 635 640  
 Ile Tyr Cys Ile Glu His Ser Phe Thr Pro Thr Asn  
 645 650

&lt;210&gt; 29

&lt;211&gt; 1408

&lt;212&gt; PRT

&lt;213&gt; Candida albicans

&lt;400&gt; 29

Met Ser Thr Ser Leu Ser His Gln Glu Leu Ser Thr Glu Lys Gly Gln  
 1 5 10 15



Ser Cys Pro Pro Ile Pro Asp Ser Asn Pro Leu Asn Pro Lys Ser Pro  
                   20                                  25                                  30  
 Ala Leu Arg Thr Thr Ser Asn Ser Thr Ile Leu Asn Ser Pro Ile Glu  
                   35                                  40                                  45  
 Thr Ile Asn Val Asn Thr Ser Ser Lys Ser Asn Ile Ser Gly Glu Ser  
           50                                  55                                  60  
 Thr Ile Asn Gly Ser Ala Tyr Ser Asn Ser Thr Thr Val Val Gln Pro  
           65                                  70                                  75                                  80  
 Glu Val Phe Gly Glu Ala His Thr Thr Thr Ser Thr His Asn Ser Ala  
                   85                                  90                                  95  
 Ser Thr Arg Thr Glu Arg Asn Glu Phe Pro Asn Ser His Leu His Gln  
                   100                                  105                                  110  
 His Gln Gln Glu Ser Arg Asn Asn Gly Glu Ser Asn Thr Pro Met Thr  
                   115                                  120                                  125  
 Ser Pro Lys His Phe Pro Thr Asp Asp Leu Arg His Ser Leu Phe Tyr  
           130                                  135                                  140  
 Lys Ala Gly Ser Ala Ala His His Lys Ser Ala Thr Ser Ser Lys Gln  
           145                                  150                                  155                                  160  
 Ser Ser Thr Thr Ser Leu Lys Asp Gly Leu Asn Asn Ala Asn Thr Tyr  
                   165                                  170                                  175  
 His Phe Gln Asn Thr Phe Leu Asp Asn Asn Val Met Ser Asp Leu Glu  
                   180                                  185                                  190  
 Glu Ser Pro Val Pro Asn Glu Arg Asn Pro Ile Gln Asp Thr Gly Leu  
           195                                  200                                  205  
 Gly Pro Arg Ser His Ala Thr Lys Phe Gly Val Gln Ser Thr Thr Ser  
           210                                  215                                  220  
 Leu Pro Thr Thr Ile Ser Gln Ser Arg Leu Pro Asn Ser Asn Lys Ser  
           225                                  230                                  235                                  240  
 Ser Phe Phe Pro Phe Lys Ser Tyr Thr Ser Ser Pro Val Lys Glu Thr  
                   245                                  250                                  255  
 Lys His Val Phe Leu Glu Tyr Asp Pro Ile Thr Arg Arg Lys Val Leu  
                   260                                  265                                  270  
 Asn Thr Tyr Glu Ile Leu Arg Glu Ile Gly Lys Gly Glu His Gly Lys  
           275                                  280                                  285  
 Val Lys Leu Ala Arg Asp Leu Ile Asn Asn Glu Leu Val Ala Ile Lys  
           290                                  295                                  300  
 Ile Val Asn Arg Lys Ser Arg Lys Glu Arg Pro Ser Leu Arg Met Arg  
           305                                  310                                  315                                  320

Lys	Asn	Ser	Ser	Ala	Pro	Val	Ile	Asn	Glu	Tyr	Glu	Leu	Lys	Val	Lys		
				325					330					335			
Arg	Glu	Ile	Ala	Ile	Met	Lys	Lys	Cys	Arg	His	Lys	His	Ile	Val	Ala		
			340					345					350				
Leu	Arg	Glu	Val	Leu	Asp	Asp	Leu	Asn	Ser	Leu	Lys	Ile	Tyr	Leu	Val		
		355					360					365					
Leu	Glu	Tyr	Met	Glu	Lys	Gly	Glu	Ile	Lys	Trp	Lys	Lys	Leu	Gln	Ser		
	370					375					380						
Asp	Val	Ala	Lys	Pro	Thr	Ala	Asn	Lys	Cys	Tyr	Asp	Ala	Asn	Asp	Asn		
385					390					395					400		
Glu	Ile	Pro	Cys	Cys	Gly	Asn	Gly	Arg	Met	Gln	Gln	Arg	Gln	Gln	Ser		
			405						410					415			
Leu	Leu	Thr	Asp	Glu	Asp	Leu	Leu	Ser	Asn	Glu	Phe	Ser	Pro	Asn	Leu		
			420					425					430				
Thr	Phe	Lys	Gln	Ser	Arg	Lys	Ile	Phe	Arg	Asp	Val	Leu	Leu	Gly	Leu		
		435					440					445					
Glu	Tyr	Leu	His	Met	Gln	Gly	Ile	Val	His	Arg	Asp	Ile	Lys	Pro	Ala		
	450					455					460						
Asn	Leu	Leu	Val	Ser	Ala	Asp	Asn	Ile	Val	Lys	Ile	Ser	Asp	Phe	Gly		
465					470					475					480		
Val	Ser	Phe	Ala	Thr	Ser	Leu	Ala	Glu	Asn	Asp	Glu	Gly	Tyr	Leu	Val		
				485					490					495			
Asn	Glu	Leu	Asp	Leu	Ala	Lys	Thr	Ala	Gly	Thr	Pro	Ala	Phe	Phe	Ala		
			500					505					510				
Pro	Glu	Leu	Cys	Gln	Phe	Asp	Asp	Glu	Thr	Ala	Thr	Glu	Lys	Leu	Ser		
	515						520					525					
Ser	Ser	Thr	Glu	Ser	Met	Ala	Pro	Pro	Lys	Ile	Asp	Tyr	Lys	Ile	Asp		
	530					535					540						
Ile	Trp	Ala	Leu	Gly	Val	Thr	Leu	Tyr	Cys	Leu	Leu	Phe	Gly	Lys	Val		
545					550					555					560		
Pro	Phe	Asn	Ala	Asp	Thr	Glu	Tyr	Asp	Leu	Phe	Gln	Val	Ile	Val	Lys		
				565					570					575			
Glu	Pro	Leu	Lys	Phe	Pro	Asn	Ser	Ile	Lys	Ala	Phe	Asn	Pro	Pro	Ala		
			580					585					590				
Thr	Val	Thr	Glu	Glu	Glu	Phe	Glu	Leu	Ala	Lys	Asp	Leu	Leu	Ser	Lys		
		595					600					605					
Met	Leu	Asp	Lys	Asn	Asn	Arg	Thr	Arg	Ile	Glu	Ile	Gln	Asp	Ile	Lys		
	610					615					620						

Glu	His	Pro	Phe	Thr	Leu	Met	Asp	Leu	Asp	Asn	Asp	Val	Asp	Gly	Leu	625	630	635	640
His	Glu	Leu	Phe	His	Leu	Asn	Gly	Asp	Asn	Pro	Val	Glu	Pro	Leu	Ser	645	650	655	
Phe	Asp	Leu	Asp	Glu	His	Asp	Ile	Val	Ser	Lys	Asp	Glu	Val	Asp	Asn	660	665	670	
Ala	Val	Ile	Gly	Val	Gly	Ala	Arg	Ile	Lys	Arg	Ser	Leu	Val	Arg	Ala	675	680	685	
Ile	Arg	Ala	Gly	Gly	Leu	Lys	Asp	Gly	Glu	Ile	Arg	Asn	Lys	Phe	Ala	690	695	700	
Ala	Leu	Gln	Leu	Glu	His	Ser	Arg	Ser	Glu	Asn	Ser	Glu	Glu	Ser	Ser	705	710	715	720
Ser	Gly	Tyr	Ser	Asn	Tyr	Ser	Ser	Ser	Thr	Arg	Leu	Leu	Gly	Tyr	Gln	725	730	735	
Asn	Gly	Gln	Asn	Tyr	Ser	Met	Ile	Leu	Ser	Glu	Gly	Leu	Pro	Val	Ser	740	745	750	
Ser	Ala	Thr	Pro	Pro	Pro	Ala	Leu	Leu	Ala	Ala	Gln	Gln	Lys	Arg	Ser	755	760	765	
Ser	Leu	Leu	Ser	Pro	Lys	Ser	Gly	Gly	Ile	Ser	Glu	Lys	Asn	Asn	Pro	770	775	780	
His	Phe	Pro	Ser	Ser	Leu	Ala	His	Gln	Ile	Pro	Asn	Thr	Ser	Ser	Pro	785	790	795	800
Ser	Thr	Cys	Ser	Ser	Ser	Thr	Ser	Met	Ala	Phe	Gln	Asn	His	Phe	Ser	805	810	815	
Phe	Ala	Gly	Met	Arg	Glu	Ser	Gly	Lys	Ser	Leu	Leu	His	Asp	Met	Ile	820	825	830	
Glu	Ser	Asn	Ser	Asn	Asn	Ser	Ser	Arg	Arg	Gly	Ser	Ser	Ala	Gly	Ile	835	840	845	
Thr	Val	Ser	Glu	Ala	Pro	Gln	Ile	Glu	Thr	Lys	Arg	Asn	Val	Gly	Gly	850	855	860	
Asp	Leu	Tyr	Leu	Lys	Asn	Gln	Ser	Val	Val	Glu	Thr	Phe	Lys	Gly	Ile	865	870	875	880
Gln	Leu	Gln	Asp	Asp	Lys	Arg	Arg	Arg	Ser	Ser	Ile	Phe	Ser	Leu	His	885	890	895	
Ser	Gln	Ile	Gly	Thr	Asn	Ser	Asn	Lys	Ser	Ser	Leu	Ser	His	Glu	Leu	900	905	910	
Thr	Pro	Thr	Gln	Thr	Gly	Ser	Gly	Ala	Ser	Thr	Gln	Gln	Gln	His	Gln	915	920	925	

His Tyr Ser Thr Asn Tyr Ser Asn Ile Ala Ala Pro Ile Pro Val Pro  
 930 935 940  
 Ala Pro Arg Lys Gln Ser Thr Ser Asp Asn Glu Gln Asp Ile Lys Ala  
 945 950 955 960  
 Pro Leu Leu His Gln Glu Lys Asn Val Met Gly Lys Pro Tyr Leu Lys  
 965 970 975  
 Ile Gly Pro Ile Ser Ile Ala Arg Glu Asp Glu Lys Ser Ala Asp Asp  
 980 985 990  
 His Pro Asp Ser Ser Ile Ile Ser Leu Pro Leu Ser Glu Ser Phe Ala  
 995 1000 1005  
 Ser Leu Asp Ser Ile Asn Asp Asp Tyr Leu Ser Arg Lys Tyr Glu Glu  
 1010 1015 1020  
 Tyr Thr Asn Asn Arg Lys Glu Asn Ser Lys Ser Glu Gly Asn Val Pro  
 1025 1030 1035 1040  
 Val Ile Ser Leu Arg Arg Lys Ser Ser Leu Ser Glu Ser Asp Leu Thr  
 1045 1050 1055  
 Arg His Val Gln Leu Lys Asp Pro Phe Gly Lys Phe Lys Pro Asp Gly  
 1060 1065 1070  
 Ser Glu Ile Ala Glu Lys Phe Lys Ala Phe Asn Leu Gly Asn Leu Met  
 1075 1080 1085  
 Lys Thr Gly Gly Lys Phe Ala Leu Ala Glu His Asn Ser Ser Asp Ser  
 1090 1095 1100  
 Gln Gln Ile Lys Gly Asn Asn Tyr Gln Ser Ser Asp Asp Gly Ile Ala  
 1105 1110 1115 1120  
 Pro Lys Ala Ile Val Pro Ala Ile Ser Tyr Ser Ser Ser Asp Ser Tyr  
 1125 1130 1135  
 Ser Ser Cys Ser Ser Ser Ser Phe Asp Asp Glu Asp Glu Ser Asp Asp  
 1140 1145 1150  
 Asp Glu Glu Asn Leu Thr Leu Ala Phe Gln Ser Lys Val Ala Pro Ile  
 1155 1160 1165  
 Ser Arg Ala Asn Phe Leu Ser Leu Thr Gly Arg Ala Lys Ser His Asp  
 1170 1175 1180  
 Ser Asn Leu Pro Thr Leu Arg Gln Asn Arg Glu Lys Gly Arg Gln Leu  
 1185 1190 1195 1200  
 Asn Pro Glu Phe Gln Gly Pro Ile Ile Phe His Asp Gly Leu Pro Glu  
 1205 1210 1215  
 Phe Glu Asp Val Pro Asp Gly Leu Ile Asn Ser Asn Pro Ile Gly Asn  
 1220 1225 1230

Asn	Asn	Val	Asn	Gly	Asn	Ser	Ala	Phe	Asn	Ser	Gly	Tyr	Ser	Tyr	Tyr
1235						1240						1245			
Asp	Asn	Val	Asn	Pro	Thr	Val	Val	Ser	Ser	Asn	Val	Ser	Thr	Ala	Thr
1250						1255						1260			
Leu	Thr	Met	Gly	Met	Ala	Pro	Ser	Glu	Ser	Val	Glu	Thr	Asn	Val	Glu
1265						1270						1280			
Ala	Pro	Ala	Gln	Glu	Asn	Ala	Val	Lys	Val	Ser	Ser	Pro	Leu	Asn	Pro
			1285						1290			1295			
His	Lys	Asn	Thr	Ser	Ser	Arg	Ser	Asp	Ile	Leu	Lys	Asp	Leu	Lys	Lys
			1300						1305			1310			
Asn	Thr	Ser	Ile	Ser	Phe	Gly	Glu	Ile	Leu	Phe	Asn	Asp	Gln	Phe	Asn
1315						1320						1325			
Asn	His	Tyr	Lys	Lys	Asp	Pro	Val	Tyr	Ser	Pro	Phe	Pro	Ser	Ala	Lys
1330						1335						1340			
His	Leu	Asp	Asn	Asp	Gln	Glu	Thr	Ile	Val	Lys	Glu	Ser	Ala	Ser	Lys
1345						1350						1360			
Phe	His	Glu	His	Arg	Pro	Thr	Tyr	Tyr	Arg	Ser	Asn	Ser	Val	Thr	Ile
			1365						1370			1375			
Gly	Leu	Leu	His	Arg	Ser	Thr	His	Arg	Glu	Asp	Asp	Asp	Asp	Val	Ser
			1380						1385			1390			
Gln	Thr	Gly	Asn	Asp	Leu	Glu	Gln	Leu	Ile	Thr	Lys	Glu	Lys	Gln	Gly
1395						1400						1405			

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<210> 30
<211> 855
<212> PRT
<213> Saccharomyces cerevisiae
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<400> 30
Met Gly Asp Glu Lys Leu Ser Arg His Thr Ser Leu Lys Arg Ala Arg
  1          5          10          15

Ser Leu Ser Glu Ser Ile Lys Gly Leu Phe Lys Pro Ser Gly Ile Ser
          20          25          30

Gly Ser Asn Asn Ala Ala Ala Pro Ser Ser Arg Pro Gly Gln Asp Gln
          35          40          45

Ala His Ser His Gln Thr Ala Arg Ile Ile Thr Ser Asn Val Ser Ser
  50          55          60

Pro Ser Ile Ser Pro Val His Ser Pro Val Leu Gln Ala Ala Pro Lys
  65          70          75          80

His His Lys Leu Gly Val Pro Asn Ile Ala Lys Leu Ser Leu Ser Pro
          85          90          95

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Ser	Arg	Glu	Pro	Ser	Leu	Asn	Ser	Glu	Asn	Glu	Met	Phe	Ser	Gln	Glu	100	105	110
Ser	Phe	Ile	Ser	Glu	Lys	Asp	Glu	Asp	Glu	Ala	Asn	Leu	Leu	Glu	Arg	115	120	125
Glu	Asp	Leu	Gln	Asn	Lys	Lys	Glu	Glu	Lys	Ala	Arg	Ala	Lys	His	Val	130	135	140
Arg	Ser	Lys	Glu	Ala	Tyr	Val	Pro	His	His	Arg	Tyr	Thr	Val	Gly	Ser	145	150	155
Asp	Glu	Val	Glu	Arg	Gln	Pro	Arg	Glu	Arg	Leu	Lys	Asn	Phe	Pro	Gln	165	170	175
Asn	Ala	Gly	Ser	Ser	Asn	Pro	Ala	Asn	Ser	Asn	Ala	Asn	His	Val	Leu	180	185	190
Asp	Gln	Glu	Asn	Asn	Phe	Ser	Ile	Asp	Ala	Met	Leu	Asp	Tyr	Asp	Glu	195	200	205
Glu	Ser	Lys	Leu	Arg	Arg	Arg	Asn	Ser	Leu	Gly	Val	Arg	Asn	His	Ser	210	215	220
Asn	Arg	Thr	Arg	Ser	Arg	Lys	Asn	Ser	Leu	Ser	Thr	Pro	Arg	Ser	Pro	225	230	235
Pro	Met	Lys	Asn	Gly	Asn	Gly	Gly	Met	Asn	Ser	Asn	Ala	Thr	Asn	Asn	245	250	255
Val	Gly	Asn	Gly	Thr	Gly	Asn	Arg	Ile	Tyr	Met	Arg	Gly	Arg	Asn	His	260	265	270
Ser	Asp	Ser	Ile	Ser	Ala	Ser	Ser	Leu	Pro	Lys	Phe	Gln	Glu	Ile	Glu	275	280	285
Cys	Lys	Cys	Ile	Leu	Asp	Leu	Gly	His	Phe	Lys	Val	Phe	Glu	Asn	Gly	290	295	300
Tyr	His	Glu	His	Ser	Leu	Arg	Val	Leu	Pro	Ile	Ile	Thr	Asn	Asn	Lys	305	310	315
Asn	Val	Asp	Ser	Gly	Asp	Glu	Lys	Asp	Ala	Asp	Ala	Ser	Val	Asn	Ser	325	330	335
Gly	Asp	Asp	Gly	Asp	Asn	Asp	Ser	Glu	Ala	Asn	Met	His	Lys	Gln	Lys	340	345	350
Ser	Val	Phe	Ser	Leu	Ser	Gly	Leu	Phe	Lys	Ser	His	Lys	Asp	Gly	Asn	355	360	365
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Glu	Glu	Asn	Gly	Glu	Gln	Ile	370	375	380
Asn	Leu	Glu	Lys	Ala	Phe	Ser	Ile	Ile	Pro	Ser	Gln	Arg	Phe	Ile	Lys	385	390	395
																400		

Ser	Gln	Thr	Leu	Lys	Lys	Ser	Arg	Thr	Ser	Asn	Leu	Lys	Asn	Gly	Asn		
				405					410					415			
Asn	Asp	Glu	Leu	Met	Lys	Asn	Asp	Gly	Lys	Asn	Ile	Pro	Gln	Ile	Val		
			420					425					430				
Asn	Pro	Asn	Ala	Ala	Val	Gly	Val	Glu	Glu	Leu	Lys	Leu	Ile	Asn	Ala		
			435				440					445					
Leu	Ser	Glu	Lys	Ile	Arg	Lys	Gly	Leu	Lys	Ser	Glu	Asn	Thr	Lys	Gly		
	450					455					460						
Asn	Asn	Gly	Glu	Gly	Arg	Ser	Asn	Ser	Asn	Lys	Gln	Glu	Asp	Ser	Asp		
465					470					475					480		
Asp	Thr	Glu	Gly	Lys	Ala	Gly	Thr	Thr	Asn	Asp	Asp	Thr	Ser	His	Lys		
				485					490					495			
Pro	Cys	Ser	Gln	Lys	Tyr	Gly	Lys	Ser	Ile	Gly	Val	Val	Gly	Ala	Gly		
			500					505					510				
Ala	Tyr	Gly	Val	Val	Lys	Ile	Cys	Ala	Arg	Cys	Lys	Thr	Ala	Lys	Asp		
	515						520					525					
Val	Leu	Pro	Tyr	Ser	Thr	Tyr	Ser	Asn	Gly	Lys	Lys	Leu	Phe	Phe	Ala		
	530					535					540						
Val	Lys	Glu	Leu	Lys	Pro	Lys	Pro	Gly	Asp	Gln	Ile	Asp	Lys	Phe	Cys		
545					550					555					560		
Thr	Arg	Leu	Thr	Ser	Glu	Phe	Ile	Ile	Gly	His	Ser	Leu	Ser	His	Pro		
				565					570					575			
His	Phe	Glu	Ala	Asn	Ala	Met	Ile	Ala	Gly	Asn	Val	Ser	Arg	Thr	Thr		
			580					585					590				
Pro	Pro	Lys	His	Val	Phe	Asn	Ala	Pro	Asn	Ile	Leu	Lys	Ile	Leu	Asp		
		595				600						605					
Leu	Met	Glu	Tyr	Ser	Asn	Ser	Phe	Val	Glu	Val	Met	Glu	Phe	Cys	Ala		
	610					615					620						
Ser	Gly	Asp	Leu	Tyr	Ser	Leu	Leu	Thr	Arg	Asn	Asn	Ile	Ser	Asn	Glu		
625					630					635					640		
Ser	Asn	Asn	Gly	Ser	Ser	Arg	Leu	Ile	Gln	Thr	Val	Lys	Glu	Gly	Ser		
				645					650					655			
Gly	Ser	Pro	Leu	His	Pro	Leu	Glu	Ala	Asp	Cys	Phe	Met	Lys	Gln	Leu		
			660					665					670				
Leu	Asn	Gly	Val	Gln	Tyr	Met	His	Asp	His	Gly	Ile	Ala	His	Cys	Asp		
		675					680					685					
Leu	Lys	Pro	Glu	Asn	Ile	Leu	Phe	Gln	Pro	Asn	Gly	Leu	Leu	Lys	Ile		
	690					695					700						

Cys Asp Phe Gly Thr Ser Ser Val Phe Gln Thr Ala Trp Glu Lys His  
 705 710 715 720  
 Val His Phe Gln Ser Gly Ala Met Gly Ser Glu Pro Tyr Val Ala Pro  
 725 730 735  
 Glu Glu Phe Ile Arg Asp Ala Glu Tyr Asp Pro Arg Leu Val Asp Cys  
 740 745 750  
 Trp Ser Cys Gly Ile Val Tyr Cys Thr Met Val Met Gly Gln Tyr Leu  
 755 760 765  
 Trp Lys Ile Ala Ile Pro Glu Lys Asp Ser Leu Phe Lys Ser Phe Leu  
 770 775 780  
 Ser Glu Ile Lys Asp Asp Gly Gln Phe Tyr Leu Phe Glu Glu Leu Arg  
 785 790 795 800  
 His Val Ser Ser Glu Leu Asn Arg Leu Arg Lys Ile Ala Leu Tyr Arg  
 805 810 815  
 Thr Phe Gln Val Asp Pro Thr Lys Arg Ile Thr Ile Glu Gln Leu Leu  
 820 825 830  
 Gln Ser Ser Trp Met Arg Lys Thr Lys Cys Cys Val Val Tyr Arg His  
 835 840 845  
 Leu His Thr Lys Val Ser Lys  
 850 855

<210> 31  
 <211> 734  
 <212> PRT  
 <213> *Saccharomyces cerevisiae*

<400> 31  
 Met Met Asp Ser Lys Thr Leu Thr Ala Ser Met Val Met Gln Glu Glu  
 1 5 10 15  
 Lys Lys Arg Gln Gln Pro Val Thr Arg Arg Val Arg Ser Phe Ser Glu  
 20 25 30  
 Ser Phe Lys Asn Leu Phe Arg Pro Pro Arg Ser Arg Asp Ser Ser Pro  
 35 40 45  
 Ile Asn Val Thr Arg Ile Pro Tyr Arg Ser Ser Ser Thr Ser Pro Lys  
 50 55 60  
 Arg Ser Ser Glu Pro Pro Arg Arg Ser Thr Val Ser Ala Gln Ile Leu  
 65 70 75 80  
 Asp Pro Lys Asn Ser Pro Ile Arg Gln Arg Ser Tyr Thr Leu Lys Cys  
 85 90 95  
 Cys Thr Pro Gly Leu Ser His Pro Phe Arg Gln Thr Gly Ser Gly Ala  
 100 105 110



Ser	Asn	Ser	Pro	Thr	Arg	His	Arg	Ser	Ile	Ser	Gly	Glu	Glu	Gln	Glu
		115					120					125			
Ile	Val	Asn	Ser	Leu	Pro	Glu	Tyr	Lys	Arg	Ser	Ala	Ser	His	Thr	Phe
		130				135					140				
His	Gly	Ile	Arg	Arg	Pro	Arg	Ser	Arg	Ser	Ser	Ser	Val	Ser	Ser	Cys
145					150					155					160
Asp	Ser	Ser	Asn	Gly	Thr	Thr	Ser	Ser	Ser	Asp	Ser	Gln	Trp	Ala	Met
				165					170					175	
Asp	Ser	Leu	Leu	Asp	Asp	Ser	Asp	Asn	Asp	Leu	Thr	Pro	Tyr	Arg	Gly
			180					185					190		
Ser	Asn	Lys	Asp	Ile	Leu	Lys	Ser	Lys	Asp	Arg	Ala	Pro	Tyr	Asn	Tyr
		195					200					205			
Ile	Asp	Asp	Tyr	Asn	Lys	Lys	Ala	Leu	Arg	Arg	Ala	Thr	Ser	Tyr	Pro
		210				215					220				
Asn	Pro	Leu	Pro	Ser	Lys	Gln	Phe	Tyr	Asn	Glu	Arg	Leu	Tyr	Thr	Arg
225					230					235					240
Arg	Ser	His	Pro	Asp	Glu	Glu	Ser	Leu	Glu	Ser	Leu	Pro	Arg	Phe	Ala
				245					250					255	
Gly	Ala	Asp	Val	Gln	Cys	Ile	Ile	Glu	Gln	Asn	Gly	Phe	Lys	Val	Tyr
			260					265					270		
Glu	Asp	Gly	Ser	His	Glu	His	Asn	Ile	Lys	Leu	Ser	Gly	Val	Ile	Ala
		275					280					285			
Lys	Leu	Glu	Lys	Gly	Asn	Ser	Leu	Pro	Ala	His	Arg	Gln	Gly	Ser	Leu
		290				295					300				
Ser	Arg	Pro	Arg	Leu	Gly	Ile	Thr	Leu	Ser	Gly	Leu	Phe	Lys	His	His
305					310					315					320
Lys	Asn	Glu	Cys	Asp	Ile	Glu	Asn	Ala	Leu	Ser	Leu	Leu	Pro	Asn	Val
				325					330					335	
Glu	Lys	Ser	Gln	Thr	Asn	His	Glu	Lys	Arg	Thr	Gly	Gln	Ser	Pro	Asn
			340					345					350		
Asp	Ser	Asn	Arg	Ser	Ser	Pro	Thr	Gln	Gly	Arg	Glu	Asp	Tyr	Leu	Lys
		355					360					365			
Ile	Val	Asn	Pro	Asp	Ala	Ser	Leu	Gly	Ser	Asp	Glu	Leu	Lys	Leu	Ile
		370				375					380				
Asn	Ser	Leu	Ser	Ser	Arg	Ile	His	Lys	Ser	Leu	Gln	Asn	Tyr	Leu	Gln
385					390					395					400
Glu	Lys	Asn	Leu	Lys	Pro	Ala	Glu	Cys	Ile	Gly	Glu	Gln	Ala	Pro	Thr
				405					410					415	

Phe	Gln	Asp	Asn	Tyr	Gly	His	Pro	Val	Gly	Leu	Val	Gly	Ala	Gly	Ala		
			420					425					430				
Tyr	Gly	Glu	Val	Lys	Leu	Cys	Ala	Arg	Leu	Arg	Asn	Glu	Lys	Asp	Ser		
		435					440					445					
Pro	Pro	Phe	Glu	Thr	Tyr	His	Asp	Ser	Lys	Tyr	Ile	Tyr	Tyr	Ala	Val		
	450					455					460						
Lys	Glu	Leu	Lys	Pro	Lys	Pro	Asp	Ser	Asp	Leu	Glu	Lys	Phe	Cys	Thr		
465					470					475					480		
Lys	Ile	Thr	Ser	Glu	Phe	Ile	Ile	Gly	His	Ser	Leu	Ser	His	Tyr	His		
				485					490					495			
Lys	Asn	Gly	Lys	Lys	Pro	Ala	Pro	Asn	Ile	Leu	Asn	Val	Phe	Asp	Ile		
			500					505					510				
Leu	Glu	Asp	Ser	Ser	Ser	Phe	Ile	Glu	Val	Met	Glu	Phe	Cys	Pro	Ala		
		515					520					525					
Gly	Asp	Leu	Tyr	Gly	Met	Leu	Val	Gly	Lys	Ser	Lys	Leu	Lys	Gly	Arg		
	530					535					540						
Leu	His	Pro	Leu	Glu	Ala	Asp	Cys	Phe	Met	Lys	Gln	Leu	Leu	His	Gly		
545					550					555					560		
Val	Lys	Phe	Met	His	Asp	His	Gly	Ile	Ala	His	Cys	Asp	Leu	Lys	Pro		
				565					570						575		
Glu	Asn	Ile	Leu	Phe	Tyr	Pro	His	Gly	Leu	Leu	Lys	Ile	Cys	Asp	Phe		
			580					585					590				
Gly	Thr	Ser	Ser	Val	Phe	Gln	Thr	Ala	Trp	Glu	Arg	Arg	Val	His	Ala		
		595					600					605					
Gln	Lys	Gly	Ile	Ile	Gly	Ser	Glu	Pro	Tyr	Val	Ala	Pro	Glu	Glu	Phe		
	610					615					620						
Val	Asp	Gly	Glu	Tyr	Tyr	Asp	Pro	Arg	Leu	Ile	Asp	Cys	Trp	Ser	Cys		
625					630					635					640		
Gly	Val	Val	Tyr	Ile	Thr	Met	Ile	Leu	Gly	His	Tyr	Leu	Trp	Lys	Val		
				645					650					655			
Ala	Ser	Arg	Glu	Lys	Asp	Met	Ser	Tyr	Asp	Glu	Phe	Tyr	Lys	Glu	Met		
			660					665					670				
Gln	Arg	Lys	Asn	Gln	Phe	Arg	Val	Phe	Glu	Glu	Leu	Lys	His	Val	Asn		
		675					680					685					
Ser	Glu	Leu	Ala	Thr	Asn	Arg	Lys	Ile	Ala	Leu	Tyr	Arg	Ile	Phe	Gln		
	690					695					700						
Trp	Glu	Pro	Arg	Lys	Arg	Ile	Ser	Val	Gly	Lys	Leu	Leu	Asp	Met	Gln		
705					710					715					720		

Trp Met Lys Ser Thr Asn Cys Cys Leu Ile Tyr Asp Ser Thr  
 725 730

<210> 32

<211> 789

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 32

Met Ser Ser Leu Thr Arg Leu Leu Gln Glu Lys Arg Lys Asn Glu Thr  
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 Ser Asn Ser Ser Pro Arg Thr Ser Ala Asp Thr Leu Thr Thr Thr Pro  
 20 25 30  
 Glu Ser Gln Ser Leu Asp Leu His Ser Arg Asn Lys Ser Ser Ser His  
 35 40 45  
 Ile Gly Ser Val Ser Asn Ser Ser Ser Ser Asp Arg Asn Arg Ala Asn  
 50 55 60  
 Val Pro Val Pro Gly Ser Val Thr Thr Val Thr Gln Ile Tyr Ser Glu  
 65 70 75 80  
 Glu Asp Ser Ser Ser Thr Ala Gly Ser Ser Leu Asp Asp Arg Asn Gln  
 85 90 95  
 Phe Ser Ser Ser Phe Leu Asn Ala Asn Phe Ala His Thr Ala Ser Phe  
 100 105 110  
 Tyr Gly Thr Ser Ala Gln Ser Arg Asp Arg Phe Gly Ser Leu Ile Asn  
 115 120 125  
 Asp Gln Gly Thr Ala Gly Leu Ser Ser His Gly Gly Ser Phe Ala Ala  
 130 135 140  
 Gln Asn Arg Ile Thr Ser Arg Leu Ser Thr Thr Ser His Thr Ser Gly  
 145 150 155 160  
 Arg Ala Ile Pro Ser Leu Ser Ser Ser Ile Pro Tyr Ser Val Pro Asn  
 165 170 175  
 Ser Asn Lys Asp Asn Asn Ser Ser Asn Ser Asn Ser Ser Ser Leu Ser  
 180 185 190  
 Ser Ser Trp Leu Glu Thr Tyr Ala Gly Gly Met Pro Asn Asn Ile Thr  
 195 200 205  
 His Glu Ser Asn Val Ile Ser Ser Pro Lys Val Asp Ser Val Glu Pro  
 210 215 220  
 Arg Phe Val Ile Ser Lys Gln Lys Leu Gln Lys Ala Ser Met Asp Ser  
 225 230 235 240  
 Asn Asn Ala Asn Ala Thr Gln Ser Arg Ser Ile Ser Arg Ser Gly Ser  
 245 250 255

Phe	Ser	Ser	Gln	Leu	Gly	Asn	Phe	Phe	Phe	Ser	Lys	Asn	Ser	Lys	Glu
			260					265					270		
Ser	Ser	Asn	Ser	Asn	Ser	Ala	Gly	Met	Ser	Phe	Ser	Ala	Asn	Ser	Asn
		275					280					285			
Gly	Pro	Ser	Pro	Asn	Ile	Lys	Asn	Pro	Asn	Val	Thr	Asn	Gly	Ser	Thr
	290					295					300				
Pro	Ile	Pro	Lys	Pro	Ile	Arg	Ala	Arg	Gln	Ser	Ser	Ile	Tyr	Ser	Ala
305					310					315					320
Ser	Arg	Gln	Pro	Thr	Gly	Ser	Tyr	Thr	Asp	Asn	Phe	Tyr	Gly	Ser	Pro
				325					330					335	
Ser	Ser	Val	His	Asp	His	Leu	Pro	Pro	Ser	Gln	Ser	Val	Pro	Arg	Ser
			340					345					350		
Gln	His	Ser	Ser	Ile	Gly	Asp	Leu	Lys	Arg	Phe	Phe	Lys	Lys	Ser	Ser
		355					360					365			
Asn	Ser	Asn	Leu	Ser	Ser	Asn	Ser	Asn	Asn	Val	Ile	Pro	Asn	Gly	Ser
	370					375					380				
Pro	Leu	Ser	Ser	Gly	Ile	Ala	Val	Pro	Ser	His	Ser	His	Ser	Ser	Ser
385					390					395					400
His	Phe	Ala	Ala	Gly	Asn	Asn	Ser	Tyr	Ser	Thr	Ser	Tyr	Asn	Gly	Asn
				405					410					415	
Gly	Asp	Thr	Ile	Tyr	Ser	His	Ser	His	Gly	Gly	Ser	Gly	Ile	Pro	Phe
			420					425					430		
Ser	Lys	Arg	Tyr	Ile	Lys	Thr	Gly	Ala	Asp	Leu	Gly	Ala	Gly	Ala	Gly
		435					440					445			
Gly	Ser	Val	Lys	Leu	Ala	Gln	Arg	Ile	Ser	Asp	Asn	Lys	Ile	Phe	Ala
	450					455					460				
Val	Lys	Glu	Phe	Arg	Thr	Lys	Phe	Glu	Asn	Glu	Ser	Lys	Arg	Asp	Tyr
465					470					475					480
Val	Lys	Lys	Ile	Thr	Ser	Glu	Tyr	Cys	Ile	Gly	Thr	Thr	Leu	Asn	His
				485					490					495	
Pro	Asn	Ile	Ile	Glu	Thr	Ile	Glu	Ile	Val	Tyr	Glu	Asn	Asp	Arg	Ile
		500						505					510		
Leu	Gln	Val	Met	Glu	Tyr	Cys	Glu	Tyr	Asp	Leu	Phe	Ala	Ile	Val	Met
		515					520					525			
Ser	Asn	Lys	Met	Ser	Tyr	Glu	Glu	Ile	Cys	Cys	Cys	Phe	Lys	Gln	Ile
	530					535					540				
Leu	Thr	Gly	Val	Gln	Tyr	Leu	His	Ser	Ile	Gly	Leu	Ala	His	Arg	Asp
545					550					555					560

Leu Lys Leu Asp Asn Cys Val Ile Asn Glu Lys Gly Ile Val Lys Leu  
 565 570 575  
 Ile Asp Phe Gly Ala Ala Val Val Phe Ser Tyr Pro Phe Ser Lys Asn  
 580 585 590  
 Leu Val Glu Ala Ser Gly Ile Val Gly Ser Asp Pro Tyr Leu Ala Pro  
 595 600 605  
 Glu Val Cys Ile Phe Ala Lys Tyr Asp Pro Arg Pro Val Asp Ile Trp  
 610 615 620  
 Ser Ser Ala Ile Ile Phe Ala Cys Met Ile Leu Lys Lys Phe Pro Trp  
 625 630 635 640  
 Lys Ile Pro Lys Leu Arg Asp Asn Ser Phe Lys Leu Phe Cys Ser Gly  
 645 650 655  
 Arg Asp Cys Asp Ser Leu Ser Ser Leu Val Thr Arg Thr Pro Asp Pro  
 660 665 670  
 Pro Ser Tyr Asp Glu Ser His Ser Thr Glu Lys Lys Lys Pro Glu Ser  
 675 680 685  
 Ser Ser Asn Asn Val Ser Asp Pro Asn Asn Val Asn Ile Gly Pro Gln  
 690 695 700  
 Arg Leu Leu His Ser Leu Pro Glu Glu Thr Gln His Ile Val Gly Arg  
 705 710 715 720  
 Met Ile Asp Leu Ala Pro Ala Cys Arg Gly Asn Ile Glu Glu Ile Met  
 725 730 735  
 Glu Asp Pro Trp Ile Arg Ser Ile Asp Met Cys His Leu Val Glu Asp  
 740 745 750  
 Gly Leu Ser Phe Lys Val Val Arg Gly Glu Asp His His His Thr Gln  
 755 760 765  
 Val Asp Gln Ser Glu Ala His Ile Ala Gly Leu Glu Lys Lys Lys Lys  
 770 775 780  
 Lys Gln Asn Asn Gln  
 785

&lt;210&gt; 33

&lt;211&gt; 699

&lt;212&gt; PRT

<213> *Saccharomyces cerevisiae*

&lt;400&gt; 33

Met Ser Leu Ser Arg Ile Leu Arg Tyr Asn Gln Arg Asn Asn Lys Thr  
 1 5 10 15  
 Thr Ala Ser Leu Thr Ala Glu His Ala Tyr Ser Asp Asn Trp Ala Tyr  
 20 25 30

Ser	Val	Ser	Leu	Gly	Asp	Pro	Thr	Ser	Val	Gly	Val	Asn	Met	Ala	Ala				
		35					40					45							
Lys	Thr	Gly	Glu	Ala	Leu	Asn	Lys	Ser	Tyr	Asp	Ser	Val	Phe	Ser	Ser				
	50					55					60								
Leu	Pro	Val	Ala	Asp	Ser	Val	Pro	Arg	Thr	Asp	Phe	Thr	Ala	Ser	Ser				
65					70					75					80				
Arg	Asp	Asp	Glu	Asn	Thr	Asp	Val	Gln	Lys	Leu	Thr	Thr	Ser	Trp	Met				
				85					90					95					
Glu	Lys	Ile	Asp	Thr	Lys	Met	Pro	Glu	Asn	Ile	Ser	Lys	Ile	Asp	Ser				
			100					105					110						
Asn	Ile	Ile	Ser	Ser	Pro	Met	Val	Ser	Lys	Val	Glu	Ala	Arg	Phe	Ile				
		115					120					125							
Val	Pro	Lys	Gly	Arg	Leu	Arg	Lys	Asn	Ser	Thr	Asp	Phe	Thr	Ser	Ser				
	130					135					140								
Phe	Ser	Asn	Ser	Leu	Ser	Leu	Pro	Lys	Ser	Tyr	Gly	Lys	Leu	Ile	Phe				
145					150					155					160				
Phe	Thr	Ser	Lys	Lys	Asn	Ser	Ser	Ser	Thr	Lys	Lys	Asn	Leu	Ala	Asn				
				165					170					175					
Asp	Ile	Ser	Asp	Asn	Lys	His	Asn	Asn	Asn	Ser	Ser	Asn	Thr	Ile	Gly				
			180				185						190						
His	Asn	Ile	Pro	Val	Thr	Thr	Ala	Thr	Ala	Thr	Cys	Asp	Glu	Ile	Ala				
		195					200					205							
Cys	Thr	Ser	Thr	Glu	His	Glu	Tyr	Asn	Val	Tyr	Glu	Glu	Glu	Arg	Met				
	210					215					220								
Phe	Thr	Thr	Arg	Val	Tyr	Ser	Leu	Glu	Asp	Ser	Val	Ser	Ser	Leu	Ser				
225					230					235					240				
Thr	Asn	Pro	Leu	Asp	Asp	Thr	Tyr	Ser	Glu	Ala	Val	Gln	Val	Asn	Thr				
				245					250					255					
Arg	His	Ile	Glu	Asp	Thr	Glu	Ser	Thr	Ala	His	Ile	Arg	Lys	His	Ser				
			260					265					270						
Tyr	Thr	Thr	Ser	Leu	Ser	Ser	Ile	Lys	Arg	Leu	Phe	Lys	Ile	Thr	Ser				
		275					280					285							
Phe	Ser	Asn	Asn	Asn	Ser	Asn	Ser	Cys	Asp	His	Gln	Glu	Ser	Thr	Val				
	290					295					300								
Ala	Asp	Asp	Cys	Ala	Ile	Ser	Ser	Ser	Leu	Lys	Glu	Thr	Thr	Ser	Ser				
305					310					315					320				
Pro	Val	Ser	Thr	Gly	Ser	Phe	Ser	Leu	Met	Ile	Glu	Asn	Glu	Asp	Ser				
				325					330					335					

Asp	Arg	Asp	Gln	Ile	Ile	Gln	Ala	Leu	Tyr	Ser	Asn	Ile	Glu	Ala	Ser	340	345	350
Thr	Asp	Leu	Val	Ser	Arg	Lys	Tyr	Arg	Asp	Leu	Asp	Val	Val	Leu	Gly	355	360	365
Glu	Gly	Ser	Gly	Gly	Lys	Val	Lys	Leu	Val	Gln	Arg	Val	Leu	Asp	Asn	370	375	380
Lys	Val	Phe	Ala	Leu	Lys	Glu	Tyr	Arg	Ser	Lys	Lys	Lys	Arg	Glu	Ser	385	390	395
Glu	Arg	Lys	Tyr	Ile	Lys	Asn	Ile	Ile	Ser	Glu	Tyr	Cys	Ile	Ala	Ser	405	410	415
Thr	Leu	Lys	Asn	Pro	Asn	Ile	Cys	Glu	Thr	Leu	Glu	Ile	Leu	Tyr	Glu	420	425	430
Lys	Gly	Lys	Ile	Phe	Gln	Ile	Leu	Glu	Tyr	Cys	Glu	Tyr	Asp	Leu	Phe	435	440	445
Ser	Leu	Val	Met	Ser	Glu	Lys	Met	His	Tyr	Glu	Glu	Ile	Cys	Cys	Leu	450	455	460
Phe	Lys	Gln	Leu	Ile	Asn	Gly	Val	Lys	Tyr	Leu	His	Asp	Ile	Gly	Leu	465	470	475
Ser	His	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Cys	Val	Val	Thr	Arg	Arg	Gly	485	490	495
Ile	Leu	Lys	Leu	Ile	Asp	Phe	Gly	Ala	Ser	Ser	Val	Phe	His	Tyr	Pro	500	505	510
Leu	Ser	Ser	Gln	Met	Ile	Glu	Ala	Asn	Gly	Ile	Val	Gly	Ser	Asp	Pro	515	520	525
Tyr	Leu	Ser	Pro	Glu	Val	Phe	Tyr	Phe	Asn	Glu	Tyr	Asp	Pro	Arg	Ala	530	535	540
Leu	Asp	Val	Trp	Ser	Val	Gly	Ile	Ile	Phe	Phe	Cys	Met	Ile	Thr	Arg	545	550	555
Arg	Phe	Pro	Trp	Lys	Tyr	Pro	Lys	Val	Lys	Asp	Val	Gln	Phe	Lys	Ala	565	570	575
Phe	Cys	Ser	Gly	Arg	Gly	Val	Ser	Ser	Phe	Lys	Asp	Leu	Val	Thr	Arg	580	585	590
Pro	Ala	Thr	Asp	Asp	Ser	Asn	Asn	Tyr	Asp	Asn	Asp	Gly	Tyr	Glu	Glu	595	600	605
Gly	Val	Ile	Asp	Met	Gly	Pro	Asn	Phe	Ile	Leu	His	Arg	Leu	Pro	Glu	610	615	620
Glu	Thr	His	Lys	Ile	Met	Arg	Arg	Ile	Leu	Glu	Val	Ser	Pro	Phe	Arg	625	630	635
																		640

Arg Ile Thr Ile Asn Gly Ile Leu Gln Asp Gly Trp Ile Lys Glu Ile  
                   645                  650                  655

Glu Thr Cys Gln Val Val Gly Ala Ala Ser Pro Asn Glu Ala Ser Leu  
                   660                  665                  670

Arg Ile Ile Asn Lys Gly Asn His Ile His Thr Asn Ile Asp Gln Arg  
                   675                  680                  685

Tyr Ala His Ile Gly Gly Leu His Gln Arg Thr  
           690                  695

<210> 34  
 <211> 560  
 <212> PRT  
 <213> *Saccharomyces cerevisiae*

<400> 34  
 Met Thr Val Ser His Asn His Ser Thr Lys Ile Ser Gln Gln Pro Ile  
   1                  5                  10                  15

Ser Ser Val Ser Ala Phe Lys Phe Phe Gly Lys Lys Leu Leu Ser Ser  
                   20                  25                  30

Ser His Gly Asn Lys Leu Lys Lys Lys Ala Ser Leu Pro Pro Asp Phe  
           35                  40                  45

His Ser Thr Ser Thr Asn Asp Ser Glu Ser Ser Ser Pro Lys Leu Pro  
           50                  55                  60

Asn Ser Leu Lys Thr Ser Arg Arg Ala Asn Ser Phe Ala His Thr Thr  
   65                  70                  75                  80

Asn Ser Lys Arg Ser Leu Ser Ser Ala Ser Thr Lys Ile Leu Pro Pro  
                   85                  90                  95

Ala Gly Ser Ser Thr Ser Ile Ser Arg Gly Asn Arg His Ser Ser Thr  
                   100                  105                  110

Ser Arg Asn Leu Ser Asn Ser Lys Phe Ser Ser Glu Arg Leu Val Tyr  
           115                  120                  125

Asn Pro Tyr Gly Val Ser Thr Pro Ser Thr Ser Leu Ser Ser Val Ser  
           130                  135                  140

Thr Ser Met Lys Lys Asp Pro Asp Leu Gly Phe Tyr Leu His Asp Gly  
   145                  150                  155                  160

Asp Ser Lys Ile Arg Met Leu Pro Ile Pro Ile Val Asp Pro Asn Glu  
                   165                  170                  175

Tyr Leu Pro Asp Glu Met Lys Glu Ala Ser Ile Gln Leu Ser Asp Asn  
                   180                  185                  190

Phe Val Phe Asp Asp Glu Asn Lys Thr Ile Gly Trp Gly Gly Ser Cys  
           195                  200                  205



Glu 210	Val	Arg	Lys	Ile	Arg	Ser 215	Lys	Tyr	Arg	Lys	Lys 220	Asp	Val	Phe	Ala
Leu 225	Lys	Lys	Leu	Asn	Met 230	Ile	Tyr	Asn	Glu	Thr 235	Pro	Glu	Lys	Phe	Tyr 240
Asn	Ala	Ala	Pro	Lys 245	Glu	Phe	Ile	Ile	Ala 250	Lys	Gln	Leu	Ser	His 255	His
Val	His	Ile	Thr 260	Asn	Thr	Phe	Leu	Leu 265	Val	Lys	Val	Pro	Thr 270	Thr	Val
Tyr	Thr	Thr 275	Arg	Gly	Trp	Gly	Phe 280	Val	Met	Glu	Leu	Gly 285	Leu	Arg	Asp
Leu	Phe 290	Ala	Met	Ile	Gln	Lys 295	Ser	Gly	Trp	Arg	His 300	Val	Ala	Leu	Ala
Glu 305	Lys	Phe	Cys	Ile	Phe 310	Lys	Gln	Val	Ala	Cys 315	Gly	Val	Lys	Phe	Cys 320
His	Asp	Gln	Gly	Ile 325	Ala	His	Arg	Asp	Leu 330	Lys	Pro	Glu	Asn	Val 335	Leu
Leu	Ser	Pro	Asp 340	Gly	Val	Cys	Lys	Leu 345	Thr	Asp	Phe	Gly	Ile 350	Ser	Asp
Trp	Tyr	His 355	His	Gly	Ser	Thr	Arg 360	Pro	Val	Gln	Pro	Cys 365	Gln	Glu	Val
Arg	Arg 370	Asp	Asp	Arg	Leu	Ala 375	Pro	Tyr	Ala	Pro	Pro 380	Glu	Val	Met	Phe
Tyr 385	Asp	Ser	Lys	Lys	His 390	Tyr	Asp	Thr	Glu	Leu 395	Gln	Gln	Pro	Tyr	Asp 400
Pro	Arg	Ala	Leu	Asp 405	Cys	Tyr	Gly	Leu	Gly 410	Ile	Ile	Leu	Met	Thr 415	Leu
Val	Asn	Asn	Val 420	Ile	Pro	Phe	Leu	Glu 425	Ser	Cys	Ser	Phe	Asp 430	Thr	Gly
Phe	Arg	Asp 435	Tyr	Cys	Asp	Ala	Tyr 440	Glu	Asn	Phe	Ile	Arg 445	Leu	His	Asp
Arg	Ala 450	Phe	Arg	Asn	Arg	Ala 455	Ile	Thr	Ala	Arg	Gly 460	Arg	Glu	Trp	Ser
Ile 465	Thr	Trp	Leu	Glu	Ile 470	Ser	Arg	Thr	Asp	Met 475	His	Leu	Ala	Trp	His 480
Gly	Gly	Ser	Leu	Thr 485	Gln	Lys	Pro	Pro	Pro 490	Ala	Thr	Pro	Ser	Thr 495	Thr
Ser	Ser	Lys	Thr 500	His	Gly	Ser	Lys	Glu 505	Leu	Arg	Leu	Val	Leu 510	Met	Pro

Thr Thr Asn Met Cys Val Arg Asn Leu Leu Ser Lys Pro Leu Arg Thr  
 515 520 525

Arg Ile Arg Gly Val Ser Ile Ser Leu Gln Met Leu Leu Gln Pro His  
 530 535 540

Pro Pro Gln Thr His Ser Leu Arg Thr Glu Ser Pro Ser Gly Gln Trp  
 545 550 555 560

<210> 35  
 <211> 818  
 <212> PRT  
 <213> *Saccharomyces cerevisiae*

<400> 35  
 Met Ala Gly Asn Gly Lys Asp Lys Glu Val Asp Lys Ser Pro Ser Val  
 1 5 10 15

Ser Thr Leu Lys Leu Leu Gly Lys Arg Leu Phe Asn Ser Ser Ser His  
 20 25 30

Thr Asp Asn Ser Ser Leu Leu Leu Ser Ala Glu Gln Leu Gly Asn Gly  
 35 40 45

Arg Ser Leu Arg Lys Arg Pro Thr Ser Pro Ser Ile Ser Gly Ser Gly  
 50 55 60

Ser Gly Gly Asn Ser Pro Ser Ser Ser Ala Gly Ala Arg Gln Arg Ser  
 65 70 75 80

Ala Ser Leu His Arg Arg Lys Asn Asn Ala Ser Val Gly Phe Ser Asn  
 85 90 95

Gly Ser Val Ser Ser His Lys Ser Ser Val Ala Leu Gln Asp Leu Ile  
 100 105 110

Lys His Asn Asn Asn Pro Tyr Leu Asn Ser Pro Ser Asp Ile Leu Gly  
 115 120 125

Thr Gly Thr Gly Ile Ala Ser Thr Arg Asp Arg Asp Arg Ala Val Leu  
 130 135 140

Asp Arg Glu Lys Glu Lys Glu Arg Ala Arg Asn Lys Glu Arg Asn Thr  
 145 150 155 160

His His Ala Gly Leu Pro Gln Arg Ser Asn Ser Met Ala Ser His His  
 165 170 175

Phe Pro Asn Glu Asn Ile Val Tyr Asn Pro Tyr Gly Ile Ser Pro Asn  
 180 185 190

His Ala Arg Pro Asp Thr Ala Phe Ala Asp Thr Leu Asn Thr Asn Lys  
 195 200 205

Glu Asn Asp Leu Ser Phe Tyr Met His Asp Gly Asn Ser Lys Ile Arg  
 210 215 220

Met	Leu	Pro	Leu	Pro	Ile	Ala	Asn	Pro	Asn	Asp	Phe	Leu	Pro	Glu	Asp	225	230	235	240
Met	Lys	Gln	Tyr	Ser	Val	His	Leu	Thr	Asp	Asn	Phe	Val	Phe	Asp	Thr	245	250	255	
Asp	Asn	Lys	Pro	Ile	Gly	Ser	Gly	Gly	Ser	Ser	Glu	Val	Arg	Lys	Val	260	265	270	
Lys	Ser	Ser	Tyr	Arg	Gln	Lys	Asp	Val	Tyr	Ala	Leu	Lys	Lys	Leu	Asn	275	280	285	
Met	Ile	Tyr	His	Glu	Ser	Pro	Glu	Lys	Phe	Tyr	Lys	Arg	Cys	Ser	Lys	290	295	300	
Glu	Phe	Ile	Ile	Ala	Lys	His	Leu	Ser	His	Asn	Val	His	Ile	Thr	Asn	305	310	315	320
Thr	Phe	Tyr	Leu	Leu	Lys	Val	Pro	Thr	Thr	Thr	Tyr	Thr	Thr	Arg	Gly	325	330	335	
Trp	Gly	Phe	Ile	Met	Glu	Leu	Gly	Val	Lys	Asp	Leu	Phe	Gln	Leu	Met	340	345	350	
Glu	Arg	Thr	Gly	Trp	Lys	Asn	Val	Pro	Phe	Asn	Glu	Lys	Tyr	Cys	Leu	355	360	365	
Phe	Lys	Gln	Val	Ala	Gln	Gly	Ile	Lys	Phe	Cys	His	Asp	Asn	Gly	Ile	370	375	380	
Ala	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Val	Leu	Ile	Ser	Lys	Glu	Gly	385	390	395	400
Ile	Cys	Lys	Leu	Thr	Asp	Phe	Gly	Ile	Ser	Asp	Trp	Tyr	His	Val	Ile	405	410	415	
Pro	His	Asp	Tyr	Thr	Ser	Pro	Val	Lys	Thr	Cys	Gln	Gly	Met	Ile	Gly	420	425	430	
Ser	Pro	Pro	Tyr	Thr	Pro	Pro	Glu	Val	Met	Tyr	Phe	Asp	Ala	Lys	Lys	435	440	445	
His	Tyr	Pro	Glu	Lys	Phe	Gln	Lys	Pro	Tyr	Asn	Pro	Leu	Ala	Met	Asp	450	455	460	
Ser	Tyr	Ala	Leu	Gly	Ile	Met	Leu	Ile	Thr	Met	Ile	Asn	Asn	Ile	Ile	465	470	475	480
Pro	Phe	Ile	Asp	Ser	Cys	Asn	Thr	Asp	Ala	Arg	Phe	Arg	Glu	Phe	Glu	485	490	495	
Val	Ser	Tyr	Asp	Asn	Phe	Ile	Asn	His	Gln	Asn	Pro	His	Phe	Arg	Asp	500	505	510	
Lys	Gly	Cys	His	Lys	Pro	Gly	Pro	Gly	Ser	Glu	Tyr	Ser	Leu	Ala	Arg	515	520	525	

[illegible]

&lt;210&gt; 36

&lt;211&gt; 603

&lt;212&gt; PRT

<213> *Saccharomyces cerevisiae*

&lt;400&gt; 36

Met	Thr	Gly	Met	Asn	Asp	Asn	Asn	Ala	Ala	Ile	Pro	Gln	Gln	Thr	Pro
1				5					10					15	
Arg	Lys	His	Ala	Leu	Ser	Ser	Lys	Val	Met	Gln	Leu	Phe	Arg	Ser	Gly
			20					25					30		
Ser	Arg	Ser	Ser	Arg	Gln	Gly	Lys	Ala	Ser	Ser	Asn	Ile	Gln	Pro	Pro
	35						40					45			
Ser	Asn	Ile	Asn	Thr	Asn	Val	Pro	Ser	Ala	Ser	Lys	Ser	Ala	Lys	Phe
	50					55					60				
Gly	Leu	His	Thr	Pro	Thr	Thr	Ala	Thr	Pro	Arg	Val	Val	Ser	Asn	Pro
65					70					75					80
Ser	Asn	Thr	Ala	Gly	Val	Ser	Lys	Pro	Gly	Met	Tyr	Met	Pro	Glu	Tyr
				85					90					95	
Tyr	Gln	Ser	Ala	Ser	Pro	Ser	His	Ser	Ser	Ser	Ser	Ala	Ser	Leu	Asn
			100					105					110		
Asn	His	Ile	Asp	Ile	Asn	Thr	Ser	Lys	Ser	Ser	Ser	Ala	Ala	Ser	Leu
		115					120					125			
Thr	Ser	Ser	Val	Ser	Ala	Leu	Ser	Leu	Ser	Pro	Thr	Ser	Ala	Ile	Asn
	130					135					140				
Ile	Ser	Ser	Lys	Ser	Leu	Ser	Pro	Lys	Phe	Ser	His	His	Ser	Asn	Ser
145					150					155					160
Asn	Thr	Ala	Ile	Thr	Pro	Ala	Pro	Thr	Pro	Thr	Ala	Ser	Asn	Ile	Asn
				165					170					175	
Asn	Val	Asn	Lys	Ile	Thr	Asn	Thr	Ser	Ala	Pro	Ile	Cys	Gly	Arg	Phe
			180					185					190		
Leu	Val	His	Lys	Asp	Gly	Thr	His	Glu	His	His	Leu	Lys	Asn	Ala	Lys
		195					200					205			
Arg	Gln	Glu	Lys	Leu	Ser	Thr	Met	Ile	Lys	Asn	Met	Val	Gly	Ala	Ser
	210					215					220				
Lys	Leu	Arg	Gly	Glu	Ala	Lys	Ser	Ala	Val	Pro	Asp	Ile	Ile	Met	Asp
225					230					235					240
Pro	Lys	Thr	Thr	Leu	Lys	Ser	Asn	Lys	Asn	Pro	Pro	Thr	Leu	Phe	Ala
				245					250					255	
Gly	Phe	Met	Lys	Gln	Val	Val	Asp	Met	Asp	Asp	Lys	Tyr	Pro	Glu	Gly
			260					265					270		

Ala	Pro	Thr	Ser	Gly	Ala	Leu	Asn	Cys	Pro	Glu	Arg	Asp	Ile	Tyr	Arg	
	275						280					285				
Ser	Asp	Gln	Lys	Asp	Ser	Lys	Asn	Asn	Thr	His	Asn	Ile	Thr	Thr	Thr	
	290					295					300					
Lys	Lys	Asp	Arg	Gln	Cys	Phe	Ala	Glu	Lys	Tyr	Gly	Arg	Cys	Gln	Glu	
305					310					315					320	
Val	Leu	Gly	Lys	Gly	Ala	Phe	Gly	Val	Val	Arg	Ile	Cys	Gln	Lys	Lys	
				325					330					335		
Asn	Val	Ser	Ser	Gln	Asp	Gly	Asn	Lys	Ser	Glu	Lys	Leu	Tyr	Ala	Val	
			340					345					350			
Lys	Glu	Phe	Lys	Arg	Arg	Thr	Ser	Glu	Ser	Ala	Glu	Lys	Tyr	Ser	Lys	
		355					360					365				
Arg	Leu	Thr	Ser	Glu	Phe	Cys	Ile	Ser	Ser	Ser	Leu	His	His	Thr	Asn	
	370					375					380					
Ile	Val	Thr	Thr	Leu	Asp	Leu	Phe	Gln	Asp	Ala	Lys	Gly	Glu	Tyr	Cys	
385					390					395					400	
Glu	Val	Met	Glu	Tyr	Cys	Ala	Gly	Gly	Asp	Leu	Phe	Thr	Leu	Val	Val	
				405					410					415		
Ala	Ala	Gly	Lys	Leu	Glu	Tyr	Met	Glu	Ala	Asp	Cys	Phe	Phe	Lys	Gln	
			420					425					430			
Leu	Ile	Arg	Gly	Val	Val	Tyr	Met	His	Glu	Met	Gly	Val	Cys	His	Arg	
		435					440					445				
Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	Leu	Thr	His	Asp	Gly	Val	Leu	Lys	
	450					455					460					
Ile	Thr	Asp	Phe	Gly	Asn	Ser	Glu	Cys	Phe	Lys	Met	Ala	Trp	Glu	Lys	
465					470					475					480	
Asn	Ile	His	Leu	Ser	Gly	Gly	Val	Cys	Gly	Ser	Ser	Pro	Tyr	Ile	Ala	
				485					490					495		
Pro	Glu	Glu	Tyr	Ile	Lys	Glu	Glu	Phe	Asp	Pro	Arg	Pro	Val	Asp	Ile	
			500					505					510			
Trp	Ala	Cys	Gly	Val	Ile	Tyr	Met	Ala	Met	Arg	Thr	Gly	Arg	Gln	Leu	
		515					520					525				
Trp	Ser	Ser	Ala	Glu	Lys	Asp	Asp	Pro	Phe	Tyr	Met	Asn	Tyr	Leu	Lys	
	530					535					540					
Gly	Arg	Lys	Glu	Lys	Gly	Gly	Tyr	Glu	Pro	Ile	Glu	Ser	Leu	Lys	Arg	
545					550					555					560	
Ala	Arg	Cys	Arg	Asn	Val	Ile	Tyr	Ser	Met	Leu	Asp	Pro	Val	Pro	Tyr	
				565					570					575		

Arg Arg Ile Asn Gly Lys Gln Ile Leu Asn Ser Glu Trp Gly Arg Glu  
 580 585 590

Ile Lys Cys Cys His Asn Gly Arg Ala Leu Lys  
 595 600

<210> 37

<211> 620

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 37

Met Val Lys Glu Thr Pro Leu His Ser Ser Ser Ser Thr Ser Leu Ser  
 1 5 10 15

Ser Leu Phe Arg Pro Thr Lys Leu Lys Asn Leu Ser Ala Lys Ile Phe  
 20 25 30

Asn Gly Gly Gly Asn Gln Ser Tyr Ser Lys Thr Asp Asp Val Ser Arg  
 35 40 45

Ser Ser Ser Arg Ser Ser Lys Lys Asn Thr Asp Ser Asp Gln Glu Asp  
 50 55 60

Gln Ile Lys Tyr Asn Lys Pro Asn Asp Arg Arg Ser Thr Ile Gly Lys  
 65 70 75 80

Ser Pro Gln Gly Asn Gly Ala Leu Ser Lys Glu Ser His Val Val Ala  
 85 90 95

Ser Ser Thr Leu Thr Gly Ile Ser Pro Thr Ser Ala Lys Lys Ala Pro  
 100 105 110

Ile Asp Tyr Ser Pro Ser Arg Pro Leu Pro Asn Asn His Asn Pro Val  
 115 120 125

Arg Thr Gly His Thr Val Pro His Leu Pro His Ser Ile His Asn Pro  
 130 135 140

Ile Asn Tyr Ile His Gln Gly Ser Lys Asp Ala Phe His His Pro His  
 145 150 155 160

Pro Val Arg Ser Thr Ala His Ser Asn Ile Ser Thr Val Ser Ser Ala  
 165 170 175

Lys Ser Asp Thr Pro Ser Ser Asn Leu Ser Tyr Gln Ala His Met His  
 180 185 190

Pro Val Glu Ile Leu Gln Lys Gln Ile Glu Asp Lys His Phe Met Asp  
 195 200 205

Ser Gln Ala Ser Thr Pro Gly Ser Val Glu Leu Gln His Asn Ser Ser  
 210 215 220

Ser Gly Ser Asp Asp Thr Ser Ser Arg Lys Lys Lys Ser Leu Arg Leu  
 225 230 235 240

Thr	Arg	Phe	Phe	Lys	Lys	Ile	His	Asn	Asp	Tyr	His	Asp	Asn	His	His	
				245					250					255		
His	His	His	His	His	Asn	Arg	Gly	Ser	Thr	Pro	Thr	Lys	Pro	Lys	Leu	
			260					265					270			
Asn	Leu	Asn	Thr	Asn	Glu	Asn	Ile	Val	Glu	Ser	Asn	Gly	Lys	Ala	Leu	
		275					280					285				
Tyr	Glu	Thr	Asp	Asn	Pro	Val	Glu	Leu	Leu	Glu	Lys	Tyr	Gly	Ile	Pro	
	290					295					300					
Gly	Arg	Lys	Leu	Gly	Glu	Gly	Ala	Ser	Gly	Ser	Val	Ser	Val	Val	Glu	
305					310					315					320	
Arg	Thr	Asp	Gly	Lys	Leu	Phe	Ala	Cys	Lys	Met	Phe	Arg	Lys	Pro	His	
				325					330					335		
Leu	Asn	Asn	Glu	Gly	Thr	Asn	Gln	Ser	Gln	Leu	Ala	Asn	Tyr	Ser	Lys	
			340					345					350			
Lys	Val	Thr	Thr	Glu	Phe	Cys	Ile	Gly	Ser	Thr	Leu	His	His	Glu	Asn	
		355					360					365				
Ile	Val	Glu	Thr	Leu	Asp	Met	Leu	Thr	Glu	Gly	Asp	Thr	Tyr	Leu	Leu	
	370					375					380					
Val	Met	Glu	Tyr	Ala	Pro	Tyr	Asp	Phe	Phe	Asn	Leu	Val	Met	Ser	Asn	
385					390					395					400	
Leu	Met	Thr	Gln	Asp	Glu	Val	Asn	Cys	Tyr	Phe	Lys	Gln	Leu	Cys	His	
				405					410					415		
Gly	Val	Asn	Tyr	Leu	His	Ser	Met	Gly	Leu	Ala	His	Arg	Asp	Leu	Lys	
		420						425					430			
Leu	Asp	Asn	Cys	Val	Val	Thr	Lys	Asp	Gly	Ile	Leu	Lys	Leu	Ile	Asp	
		435					440					445				
Phe	Gly	Ser	Ala	Val	Val	Phe	Gln	Tyr	Pro	Tyr	Glu	Asp	Thr	Ile	Val	
	450					455					460					
Lys	Ser	His	Gly	Ile	Val	Gly	Ser	Asp	Pro	Tyr	Leu	Ala	Pro	Glu	Leu	
465					470				475						480	
Leu	Lys	Gln	Thr	Ser	Tyr	Asp	Pro	Arg	Val	Ala	Asp	Val	Trp	Ser	Ile	
				485					490					495		
Ala	Ile	Ile	Phe	Tyr	Cys	Met	Val	Leu	Lys	Arg	Phe	Pro	Trp	Lys	Ala	
			500					505					510			
Pro	Lys	Lys	Ser	Phe	Asn	Ser	Phe	Arg	Leu	Phe	Thr	Glu	Glu	Pro	Glu	
		515					520					525				
Asp	Glu	Asp	Asp	Ile	Val	Arg	Gly	Pro	Asn	Lys	Ile	Leu	Arg	Leu	Leu	
	530					535					540					



Pro Arg His Ser Arg Thr Ile Ile Gly Arg Met Leu Ala Leu Glu Pro  
 545 550 555 560

Lys Gln Arg Val Leu Met Asn Asp Val Val Lys Asp Asp Trp Leu Val  
 565 570 575

Ser Val Pro Ser Cys Glu Val Asp Pro Thr Ser Gly Asp Leu Val Glu  
 580 585 590

Lys Pro Lys Asn His Lys His His Leu Val Thr Glu Glu Glu Leu Asn  
 595 600 605

Glu Leu Thr Lys Gln His Gly Asn Lys Asp Ser Asn  
 610 615 620

<210> 38

<211> 759

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 38

Met Pro Asn Leu Leu Ser Arg Asn Pro Phe His Gly His His Asn Asp  
 1 5 10 15

His His His Asp Arg Glu Asn Ser Ser Asn Asn Pro Pro Gln Leu Ile  
 20 25 30

Arg Ser Ser Lys Ser Phe Leu Asn Phe Ile Gly Arg Lys Gln Ser Asn  
 35 40 45

Asp Ser Leu Arg Ser Glu Lys Ser Thr Asp Ser Met Lys Ser Thr Thr  
 50 55 60

Thr Thr Thr Asn Tyr Thr Thr Thr Asn Leu Asn Asn Asn Thr His Ser  
 65 70 75 80

His Ser Asn Ala Thr Ser Ile Ser Thr Asn Asn Tyr Asn Asn Asn Tyr  
 85 90 95

Glu Thr Asn His His His Asn Ile Ser His Gly Leu His Asp Tyr Thr  
 100 105 110

Ser Pro Ala Ser Pro Lys Gln Thr His Ser Met Ala Glu Leu Lys Arg  
 115 120 125

Phe Phe Arg Pro Ser Val Asn Lys Lys Leu Ser Met Ser Gln Leu Arg  
 130 135 140

Ser Lys Lys His Ser Thr His Ser Pro Pro Pro Ser Lys Ser Thr Ser  
 145 150 155 160

Thr Val Asn Leu Asn Asn His Tyr Arg Ala Gln His Pro His Gly Phe  
 165 170 175

Thr Asp His Tyr Ala His Thr Gln Ser Ala Ile Pro Pro Ser Thr Asp  
 180 185 190

Ser	Ile	Leu	Ser	Leu	Ser	Asn	Asn	Ile	Asn	Ile	Tyr	His	Asp	Asp	Cys
		195					200					205			
Ile	Leu	Ala	Gln	Lys	Tyr	Gly	Lys	Leu	Gly	Lys	Leu	Leu	Gly	Ser	Gly
	210					215					220				
Ala	Gly	Gly	Ser	Val	Lys	Val	Leu	Val	Arg	Pro	Thr	Asp	Gly	Ala	Thr
225					230					235					240
Phe	Ala	Val	Lys	Glu	Phe	Arg	Pro	Arg	Lys	Pro	Asn	Glu	Ser	Val	Lys
				245					250					255	
Glu	Tyr	Ala	Lys	Lys	Cys	Thr	Ala	Glu	Phe	Cys	Ile	Gly	Ser	Thr	Leu
			260					265					270		
His	His	Pro	Asn	Val	Ile	Glu	Thr	Val	Asp	Val	Phe	Ser	Asp	Ser	Lys
		275					280					285			
Gln	Asn	Lys	Tyr	Tyr	Glu	Val	Met	Glu	Tyr	Cys	Pro	Ile	Asp	Phe	Phe
	290					295					300				
Ala	Val	Val	Met	Thr	Gly	Lys	Met	Ser	Arg	Gly	Glu	Ile	Asn	Cys	Cys
305					310					315					320
Leu	Lys	Gln	Leu	Thr	Glu	Gly	Val	Lys	Tyr	Leu	His	Ser	Met	Gly	Leu
				325					330					335	
Ala	His	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Cys	Val	Met	Thr	Ser	Gln	Gly
			340					345						350	
Ile	Leu	Lys	Leu	Ile	Asp	Phe	Gly	Ser	Ala	Val	Val	Phe	Arg	Tyr	Pro
		355					360						365		
Phe	Glu	Asp	Gly	Val	Thr	Met	Ala	His	Gly	Ile	Val	Gly	Ser	Asp	Pro
	370					375					380				
Tyr	Leu	Ala	Pro	Glu	Val	Ile	Thr	Ser	Thr	Lys	Ser	Tyr	Asp	Pro	Gln
385					390					395					400
Cys	Val	Asp	Ile	Trp	Ser	Ile	Gly	Ile	Ile	Tyr	Cys	Cys	Met	Val	Leu
				405					410					415	
Lys	Arg	Phe	Pro	Trp	Lys	Ala	Pro	Arg	Asp	Ser	Asp	Asp	Asn	Phe	Arg
			420					425					430		
Leu	Tyr	Cys	Met	Pro	Asp	Asp	Ile	Glu	His	Asp	Tyr	Val	Glu	Ser	Ala
		435					440					445			
Arg	His	His	Glu	Glu	Leu	Leu	Lys	Glu	Arg	Lys	Glu	Lys	Arg	Gln	Arg
	450					455					460				
Phe	Leu	Asn	His	Ser	Asp	Cys	Ser	Ala	Ile	Asn	Gln	Gln	Gln	Pro	Ala
465					470					475					480
His	Glu	Ser	Asn	Leu	Lys	Thr	Val	Gln	Asn	Gln	Val	Pro	Asn	Thr	Pro
				485					490					495	

Ala Ser Ile Gln Gly Lys Ser Asp Asn Lys Pro Asp Ile Val Glu Glu  
                   500                                  505                                  510  
 Glu Thr Glu Glu Asn Lys Glu Asp Asp Ser Asn Asn Asp Lys Glu Ser  
                   515                                  520                                  525  
 Thr Pro Asp Asn Asp Lys Glu Ser Thr Ile Asp Ile Lys Ile Ser Lys  
                   530                                  535                                  540  
 Asn Glu Asn Lys Ser Thr Val Val Ser Ala Asn Pro Lys Lys Val Asp  
   545                                  550                                  555                                  560  
 Ala Asp Ala Asp Ala Asp Cys Asp Ala Asn Gly Asp Ser Asn Gly Arg  
                   565                                  570                                  575  
 Val Asp Cys Lys Ala Asn Ser Asp Cys Asn Asp Lys Thr Asp Cys Asn  
                   580                                  585                                  590  
 Ala Asn Asn Asp Cys Ser Asn Glu Ser Asp Cys Asn Ala Lys Val Asp  
                   595                                  600                                  605  
 Thr Asn Val Asn Thr Ala Ala Asn Ala Asn Pro Asp Met Val Pro Gln  
                   610                                  615                                  620  
 Asn Asn Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln  
   625                                  630                                  635                                  640  
 Gln Gln Gln Gln Gln Gln Gln His His His His Gln His Gln Asn Gln  
                   645                                  650                                  655  
 Asp Lys Ala His Ser Ile Ala Ser Asp Asn Lys Ser Ser Gln Gln His  
                   660                                  665                                  670  
 Arg Gly Pro His His Lys Lys Ile Ile His Gly Pro Tyr Arg Leu Leu  
                   675                                  680                                  685  
 Arg Leu Leu Pro His Ala Ser Arg Pro Ile Met Ser Arg Ile Leu Gln  
                   690                                  695                                  700  
 Val Asp Pro Lys Lys Arg Ala Thr Leu Asp Asp Ile Phe Asn Asp Glu  
   705                                  710                                  715                                  720  
 Trp Phe Ala Ala Ile Ala Ala Cys Thr Met Asp Ser Lys Asn Lys Val  
                   725                                  730                                  735  
 Ile Arg Ala Pro Gly His His His Thr Leu Val Arg Glu Glu Asn Ala  
                   740                                  745                                  750  
 His Leu Glu Thr Tyr Lys Val  
                   755

&lt;210&gt; 39

&lt;211&gt; 636

&lt;212&gt; PRT

&lt;213&gt; Schizosaccharomyces pombe

&lt;400&gt; 39

Met	Gly	Glu	Lys	Asp	Lys	Leu	His	Glu	Ile	Ser	Ser	Lys	Phe	Ala	Ser	1	5	10	15
Leu	Gly	Leu	Gly	Ser	Leu	Lys	Ser	Thr	Pro	Lys	Ala	Arg	Glu	Thr	Thr	20	25	30	
Glu	Pro	Pro	Pro	Ser	Ser	Gln	Gln	Pro	Pro	Ser	Thr	Pro	Asn	Gly	35	40	45		
Lys	Glu	Ala	Ala	Ser	Pro	Ser	Ala	Leu	Lys	Gln	Asn	Val	Arg	Pro	Ser	50	55	60	
Leu	Asn	Ser	Val	Gln	Gln	Thr	Pro	Ala	Ser	Ile	Asp	Ala	Val	Ala	Ser	65	70	75	80
Ser	Ser	Asn	Val	Ser	Leu	Gln	Ser	Gln	Gln	Pro	Leu	Ser	Lys	Pro	Val	85	90	95	
Val	Ser	Ser	Lys	Pro	Asn	Gln	Thr	Thr	Ala	Met	Pro	Pro	Pro	Ser	Asn	100	105	110	
Asn	Pro	Ser	Arg	His	Val	Ser	Ser	Thr	Ser	Asn	Lys	Pro	Ala	Ala	Val	115	120	125	
Ser	Pro	Asn	Pro	Ala	Ala	His	His	Ala	Glu	Leu	Pro	Ser	Gly	Ser	Val	130	135	140	
Pro	Pro	Ser	Ala	Ser	Val	Ser	Arg	Ala	Asn	Ser	Thr	Ala	Thr	Thr	Thr	145	150	155	160
Pro	His	Lys	Ala	Gly	Val	Val	Ser	Asn	Pro	Ala	Ala	Ala	Asn	Val	His	165	170	175	
Val	Leu	Ser	Val	Ala	Ala	Ser	Pro	Asn	Pro	Ser	Thr	Pro	Ser	Asn	Gly	180	185	190	
Pro	Ala	Pro	Val	Ser	Thr	Thr	Ala	Thr	Pro	Ser	Arg	Asn	Pro	Val	Thr	195	200	205	
Arg	Leu	Gln	Arg	Ile	Phe	Ser	Gln	Asn	Ser	Val	Ser	Arg	Gln	Asn	Ser	210	215	220	
Arg	Thr	Gly	Arg	Gly	Ala	Ala	Val	Ala	Asn	Thr	Glu	Glu	Thr	Asn	Ser	225	230	235	240
Thr	Gly	Gly	Ser	Glu	Thr	Gly	Gly	Ala	Ala	Asn	Ser	Ser	Ser	Thr	Ser	245	250	255	
Asn	Pro	Ser	Ser	Ala	Lys	Trp	Ser	Arg	Phe	Thr	Val	Tyr	Asp	Asp	Ala	260	265	270	
Ser	His	Thr	His	Gln	Leu	Arg	Pro	Ala	Arg	Arg	Gln	Glu	Lys	Leu	Gly	275	280	285	
Lys	Met	Leu	Lys	Asp	Phe	Leu	Ala	Gly	Asn	Ser	Lys	Lys	Arg	Glu	Glu	290	295	300	

Glu	Arg	Ile	Ala	Lys	Glu	Ala	Ala	Asp	Ala	Gln	His	Gln	Leu	Ser	Leu	305	310	315	320
Val	Gln	Ser	Trp	Ile	Asn	Gly	Tyr	Gly	Gln	Glu	Lys	Leu	Ala	Asp	Lys	325	330	335	
Lys	Asp	Pro	Ala	Lys	Val	Ser	Ala	Ser	Phe	Val	Glu	Lys	Tyr	Gly	Arg	340	345	350	
Cys	Gln	Glu	Val	Ile	Gly	Arg	Gly	Ala	Phe	Gly	Val	Val	Arg	Ile	Ala	355	360	365	
His	Lys	Val	Asp	Pro	Gln	Asn	Ser	Gly	Ser	Glu	Thr	Leu	Tyr	Ala	Val	370	375	380	
Lys	Glu	Phe	Arg	Arg	Lys	Pro	Ala	Glu	Ser	Gln	Lys	Lys	Tyr	Thr	Lys	385	390	395	400
Arg	Leu	Thr	Ser	Glu	Phe	Cys	Ile	Ser	Ser	Ser	Leu	Arg	His	Pro	Asn	405	410	415	
Val	Ile	His	Thr	Leu	Asp	Leu	Ile	Gln	Asp	Gly	Lys	Gly	Asp	Tyr	Cys	420	425	430	
Glu	Val	Met	Glu	Leu	Cys	Ser	Gly	Gly	Asp	Leu	Tyr	Thr	Leu	Ile	Met	435	440	445	
Ala	Ala	Gly	Arg	Leu	Glu	Pro	Met	Glu	Ala	Asp	Cys	Phe	Phe	Lys	Gln	450	455	460	
Leu	Met	Arg	Gly	Val	Asp	Tyr	Leu	His	Asp	Met	Gly	Val	Ala	His	Arg	465	470	475	480
Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	Leu	Thr	Val	Ser	Gly	Ser	Leu	Lys	485	490	495	
Ile	Thr	Asp	Phe	Gly	Asn	Gly	Glu	Cys	Phe	Arg	Met	Ala	Trp	Glu	Lys	500	505	510	
Glu	Ala	His	Met	Thr	Cys	Gly	Leu	Cys	Gly	Ser	Ala	Pro	Tyr	Ile	Ala	515	520	525	
Pro	Glu	Glu	Tyr	Thr	Glu	Ser	Glu	Phe	Asp	Pro	Arg	Ala	Val	Asp	Val	530	535	540	
Trp	Ala	Cys	Gly	Val	Ile	Tyr	Met	Ala	Met	Arg	Thr	Gly	Arg	His	Leu	545	550	555	560
Trp	Arg	Val	Ala	Lys	Lys	Ser	Glu	Asp	Glu	Tyr	Tyr	Ser	Arg	Tyr	Leu	565	570	575	
Met	Asp	Arg	Lys	Asn	Glu	Ser	Gly	Tyr	Glu	Pro	Ile	Glu	Met	Leu	Glu	580	585	590	
Arg	Ser	Arg	Cys	Arg	Asn	Thr	Leu	Tyr	Asn	Ile	Leu	His	Pro	Asn	Pro	595	600	605	

Thr Tyr Arg Leu Thr Ala Lys Gln Ile Met Lys Ser Glu Trp Val Arg  
 610 615 620

Ser Ile Thr Leu Cys Glu Ala Gly Asn Ala Gly Leu  
 625 630 635

<210> 40

<211> 650

<212> PRT

<213> Schizosaccharomyces pombe

<400> 40

Met Ser Val Thr Pro Pro Asn Val Gln Phe Asn Leu Asn Gly Asp Ser  
 1 5 10 15

Asp His Lys Ser Asp Asn Ser Ser Ser Ser Leu Glu Asn Lys Leu Asp  
 20 25 30

Thr Glu Leu Lys Ile Thr Ser Pro Pro Arg Asn Pro Pro Gln Arg Leu  
 35 40 45

His Pro Val Asp Phe Ser Glu His Ala Asp Thr Asp Asp Asp Met Asn  
 50 55 60

His Pro Leu Pro Arg Val Gln Ser Pro Val His Ile Lys Asn His Ile  
 65 70 75 80

Asp Pro Lys Leu Ala Glu Asp Arg Tyr Arg Ser Ser Ala Ala Arg His  
 85 90 95

Phe Glu Pro Ile Ser Ile Pro Pro Ser Ala Ile Thr Ser Glu Asp Glu  
 100 105 110

Asp Asp Tyr His Gly Ser Ala Asn Ser Ser Thr Val Leu Pro Pro Arg  
 115 120 125

Thr Glu Asn Ala Leu His Ala Ala Ser Pro Lys Pro Ser Gly Ser Thr  
 130 135 140

Gly Tyr Thr Ser Pro Ala Leu Ser Gln Asn Ser Gly Ser Gly Gly Glu  
 145 150 155 160

Gly Glu Ser Asp Glu Gly Ser Phe Asn Thr Gln His His Arg Ser Pro  
 165 170 175

Ile Phe Gln Ala Tyr Pro Ser Ser Glu Asp Leu Val Gly Asp Pro Asn  
 180 185 190

Asp Pro Tyr Arg Arg Thr Arg Arg Ala Pro Ile Lys Thr Asn Pro His  
 195 200 205

Asp Ile Pro Ser Gln Phe Ile Phe Arg Lys Leu Gly Leu His His Gly  
 210 215 220

Lys His Gly His His Gly His Ser Gly Ser Leu Ser Leu Lys Ser Leu  
 225 230 235 240

Val	Pro	Asn	His	His	Asp	Lys	His	Asp	Lys	His	Asp	Lys	His	Glu	Lys		
				245					250					255			
His	His	Ser	Ser	Leu	Asp	Leu	Arg	Arg	Phe	Phe	Lys	Ser	His	Gln	Lys		
			260					265					270				
Thr	Asp	Lys	Glu	Lys	Lys	Pro	Ser	Val	Ser	Lys	Ser	Lys	Ser	Ser	Ala		
		275					280						285				
Asn	Leu	Gln	Asp	Asp	His	Phe	Gly	Leu	Phe	Lys	Lys	Tyr	Gly	Lys	Phe		
	290					295					300						
Gly	Arg	Met	Leu	Gly	Ser	Gly	Ala	Gly	Gly	Ser	Val	Arg	Ile	Met	Lys		
305					310					315					320		
Arg	Ser	Ser	Asp	Gly	Lys	Ile	Phe	Ala	Val	Lys	Glu	Phe	Arg	Ala	Arg		
				325					330					335			
Arg	Pro	Thr	Glu	Thr	Glu	Arg	Glu	Tyr	Ala	Arg	Lys	Val	Thr	Ala	Glu		
			340					345					350				
Phe	Cys	Ile	Gly	Ser	Ala	Leu	His	His	Thr	Asn	Ile	Ile	Glu	Thr	Leu		
		355					360					365					
Asp	Ile	Val	Glu	Glu	Asn	Lys	Lys	Phe	Tyr	Glu	Val	Met	Glu	Tyr	Ala		
	370					375					380						
Pro	Tyr	Asp	Met	Phe	Ser	Ile	Val	Met	Ser	Gly	Lys	Met	Thr	Met	Pro		
385					390					395					400		
Glu	Val	Tyr	Cys	Cys	Phe	Lys	Gln	Leu	Leu	Ser	Gly	Val	Ala	Tyr	Leu		
				405					410					415			
His	Ser	Met	Gly	Leu	Ala	His	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Leu	Val		
			420					425					430				
Val	Asp	Ser	Asn	Cys	Phe	Val	Lys	Ile	Ile	Asp	Phe	Gly	Ser	Ala	Val		
		435					440					445					
Val	Phe	Lys	Tyr	Pro	Phe	Glu	Ala	Asp	Ile	Val	Glu	Ala	Thr	Gly	Val		
	450					455					460						
Val	Gly	Ser	Asp	Pro	Tyr	Leu	Ala	Pro	Glu	Thr	Leu	Val	Arg	Lys	Leu		
465					470					475					480		
Tyr	Asp	Pro	Arg	Ala	Val	Asp	Ile	Trp	Ser	Ser	Ala	Ile	Ile	Phe	Cys		
				485					490					495			
Cys	Met	Ala	Leu	Arg	Arg	Phe	Pro	Trp	Lys	Tyr	Pro	Lys	Leu	Ser	Asp		
		500						505					510				
Asn	Ser	Phe	Arg	Leu	Phe	Cys	Met	Lys	Gln	Pro	Ser	Asn	Asp	Ala	Glu		
		515					520					525					
Ser	Pro	Ser	Asp	Ile	Leu	Ala	Asp	Ile	Lys	Lys	Gln	Arg	Leu	Val	Glu		
	530					535					540						

Gln Gly Cys Glu Pro Ile Arg Lys Thr Asp Glu Ser His Ser Pro Asn  
 545 550 555 560  
 Ser Lys Thr Asp Asn Ser Ser Thr His Lys Gln Glu Leu Tyr Gly Pro  
 565 570 575  
 Trp Arg Leu Leu Arg Leu Leu Pro Arg Glu Thr Arg Ala Val Ile Ala  
 580 585 590  
 His Met Leu Glu Leu Asp Pro Val Lys Arg Tyr Asp Ile His Arg Val  
 595 600 605  
 Phe Ala Asp Asn Trp Ile Asn Asp Ile Ser Met Cys His Met Glu Asn  
 610 615 620  
 Gly Lys Val Ile His Ser Pro Thr His Val His Asn Leu Val Ala Ser  
 625 630 635 640  
 Glu Glu Ser Pro Ala Pro Pro Ala Lys His  
 645 650

<210> 41  
 <211> 812  
 <212> PRT  
 <213> Candida albicans

<400> 41  
 Met Thr Lys Glu His Ser Ile Arg Asn Ile Phe Lys Lys Asp Lys Thr  
 1 5 10 15  
 Pro Asp Asn Gly Ser Ala Thr Ala Thr Pro Ser Ser Ser His Thr Gly  
 20 25 30  
 Leu Ser Lys Leu Phe His Lys Glu Ser Lys Pro Ile Thr Pro Pro Met  
 35 40 45  
 Lys Arg Thr Pro Ser Val Ser Ser Leu Lys Arg Arg Asn Thr Asn Pro  
 50 55 60  
 Ser Gln Thr Ser Gly Ile Ser Leu Asn His Asn His His His His Gln  
 65 70 75 80  
 Asp Ser Gln Asn His Asn Asp Ala Thr Thr Ser Gly Gly Asn Ile His  
 85 90 95  
 Ser Ser Thr Pro Val Asn Arg Ser Arg Ser Asn Ser Asp Arg Leu Gly  
 100 105 110  
 His Val Pro Pro Thr Gly Arg Lys Val Leu Ser Lys Ala Glu Thr Phe  
 115 120 125  
 Thr His Leu Gln Gln Leu Asp Thr Arg Asn Ala Ala Lys Asn Gln Leu  
 130 135 140  
 Arg Asn His Arg Ile Pro Ser Asn His Leu Ser Ser Pro Leu Ser Ala  
 145 150 155 160



Ala	Pro	His	Ser	Asp	Lys	Ile	Val	Tyr	Asn	Pro	Tyr	Gly	Leu	Asn	Lys
				165					170					175	
Thr	Ala	Thr	Gln	Glu	Arg	Pro	Lys	Asn	Thr	Ser	Phe	Tyr	Leu	Ser	Gly
			180					185					190		
Val	Asn	Asp	Gly	Glu	Arg	Val	Leu	Ser	Asn	Pro	Val	Ala	Ser	Pro	Asn
		195					200					205			
Asp	Tyr	Leu	Pro	Ala	Glu	Leu	Gln	Gln	Gln	His	Val	Asn	Leu	Leu	Glu
	210					215					220				
Asp	Phe	Glu	Ile	Asp	Val	Gly	Thr	Lys	Lys	Leu	Gly	Asp	Gly	Gly	Ser
225					230					235					240
Ser	Asp	Val	Arg	Ile	Ile	Asn	Ser	Cys	His	His	Lys	Lys	Asp	Leu	Tyr
				245					250					255	
Ala	Leu	Lys	Lys	Phe	Thr	Leu	Leu	Ser	Lys	Glu	Thr	Asp	Glu	Asp	Phe
			260					265					270		
Tyr	Lys	Arg	Val	Ser	Glu	Glu	Tyr	Lys	Ile	His	Arg	Lys	Ala	Ala	Ile
		275					280					285			
Ser	Arg	His	Val	Val	Asp	Ala	Phe	Ala	Ile	Leu	Arg	Ile	Gln	Ser	Gln
	290					295					300				
Ser	Asn	Leu	Thr	Arg	Gly	Trp	Gly	Met	Val	Met	Glu	Phe	Cys	Gly	Gly
305					310					315					320
Gly	Asp	Leu	Phe	Ser	Val	Ile	Val	Lys	Pro	Gly	Trp	Lys	Ser	Thr	Pro
				325					330					335	
Leu	Ala	Glu	Lys	Tyr	Cys	Leu	Phe	Lys	Gln	Ile	Ala	Tyr	Gly	Val	Lys
			340					345					350		
Phe	Leu	His	Asp	His	Asp	Ile	Val	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn
		355					360					365			
Val	Leu	Leu	Asp	Ala	Asn	Gly	Leu	Ala	Lys	Leu	Cys	Asp	Phe	Gly	Val
	370					375					380				
Ser	Glu	Phe	Gly	His	Glu	Val	Pro	Glu	Asp	Phe	Ser	Ser	Pro	Val	Lys
385					390					395					400
Leu	Ser	Thr	Ala	Tyr	Val	Gly	Ser	Pro	Pro	Tyr	Ala	Pro	Pro	Glu	Val
				405					410					415	
Met	Leu	Leu	Lys	Glu	Lys	Ser	Ser	Thr	Glu	Ile	Lys	Ala	Phe	Ala	Tyr
			420					425					430		
Asp	Pro	Phe	Lys	Met	Asp	Cys	Trp	Gly	Leu	Gly	Met	Leu	Leu	Phe	Cys
		435					440					445			
Leu	Val	Tyr	Gly	Gly	Val	Pro	Phe	Gln	Gln	Ser	Ser	Pro	Asn	Asp	His
	450					455					460				

Ala	Phe	Arg	Asp	Tyr	Lys	Phe	Ser	His	Lys	Arg	Phe	Cys	Thr	Asp	His
465					470					475					480
His	Thr	Phe	Lys	Ser	Asn	Gln	Gly	Tyr	Pro	Arg	Gly	Pro	Gly	Ser	Glu
			485						490					495	
Phe	Lys	Leu	Ala	Ala	Lys	Phe	Glu	Asn	Asn	Gly	Ala	Ser	Arg	Val	Ala
			500					505					510		
Trp	Lys	Leu	Cys	Asp	Pro	Ser	Glu	Asn	Thr	Arg	Tyr	Thr	Met	Asp	Met
		515					520						525		
Leu	Phe	Asp	Asp	Pro	Trp	Phe	Gln	Ser	Val	Glu	Met	Cys	Ile	Tyr	Glu
	530					535					540				
Ser	Pro	Asp	Gln	Glu	Val	Asn	Pro	Phe	Val	Leu	Pro	Gly	Thr	Gly	Glu
545					550					555					560
Asn	Ile	Asp	Thr	His	Ser	Val	Ser	Gly	Tyr	Ser	Ser	Val	Asn	Asn	Ser
				565					570					575	
Gln	Ala	Pro	Ser	Arg	Arg	Gly	Thr	Phe	Thr	Ser	Arg	Pro	Val	Gly	Ser
			580					585					590		
Gly	Ala	Gly	Ser	Gly	Tyr	Asn	Ser	His	Asp	Glu	Ser	Ser	Asn	Gly	Leu
		595					600						605		
Ser	Ser	Ser	Phe	Arg	Ser	Met	Leu	Asp	Leu	Lys	Asp	Ile	Pro	Gln	Lys
		610				615					620				
Ile	Thr	Lys	Thr	Asp	Glu	Pro	Leu	Pro	Ser	Asn	Ser	Ser	Val	His	Ser
625					630					635					640
Asn	Asp	Ser	Ser	Ser	Ala	Arg	Ala	Lys	Ser	Lys	Leu	Asp	His	Pro	Ser
				645					650					655	
Ser	Pro	Gly	Ser	Leu	Leu	Ser	Pro	Ser	Thr	Pro	Ala	Leu	Gln	Ser	Ile
			660					665					670		
Pro	Ala	Asp	Arg	Val	Ala	Gln	Thr	Thr	Ser	Pro	Ile	Asn	Ala	Ser	Leu
		675					680					685			
Pro	Ala	Val	Glu	Glu	Ser	Asp	Ile	Glu	His	Glu	Ser	Glu	Ser	Glu	Ile
		690				695					700				
Gln	Gly	Asp	Glu	Thr	Glu	Ser	Ser	Gly	Leu	Gln	Val	Leu	Pro	Pro	Ile
705					710					715					720
Asp	Asp	Val	Val	Ala	Ala	Ser	Pro	Ser	Ser	Leu	Thr	His	Glu	Pro	Gln
				725					730					735	
Glu	Gln	Val	Leu	Asp	Ser	Val	Glu	Ser	Cys	Ile	Ser	Leu	Pro	Pro	Asn
			740					745					750		
Arg	Asp	Gln	Ala	Phe	Ala	Gly	Lys	Asp	Gly	Glu	Met	Cys	Ser	Leu	Val
		755					760					765			

Asp Leu Lys Pro Ala Ala Leu Lys Ser Ala Thr Asp Leu Gln Leu Gly  
 770 775 780

Ala Asp Gly Met Cys Asn Leu Gly Tyr Lys Ile Lys Lys His His His  
 785 790 795 800

Thr Glu Val Ser Asn Val Ser Asn Ser Ser Arg Arg  
 805 810

<210> 42

<211> 800

<212> PRT

<213> Candida albicans

<400> 42

Met Ser Ser Leu Thr Lys Leu Leu His Glu Ser Thr Ser Thr Leu Ala  
 1 5 10 15

Ser Pro Val Leu Ser Arg Asn Thr Ser Glu Val Thr Phe Lys Asp Gln  
 20 25 30

Gly Arg Arg Thr Pro Glu Ile Leu Asn Ile Ser Asp Thr Val Asp Ala  
 35 40 45

Lys Ser Pro Gly Ile Thr Ile Asp Val Ser Lys Pro Lys Pro Ser Pro  
 50 55 60

Ile Asp Thr Asp Gly Met Asn Val Glu Pro Gln Ala Val His Gly Phe  
 65 70 75 80

Asp Pro Ser Pro Asn Thr Lys Val Ser Phe Ser Ser Pro Phe Ser Pro  
 85 90 95

Thr Ser Pro Phe Thr Arg Gln Ser Ser Asn Ser Phe Ser Ser Asn Gln  
 100 105 110

Ala Phe Gln Asn Thr Arg Gly Ala Val Ala Ser Pro Arg Tyr Ile Lys  
 115 120 125

Asn Asn Ser Val Ser His Ser Ser Val Phe Met Gly Gly Glu Ser Leu  
 130 135 140

Ser Ser Ser Ile Pro Tyr Ser Ala Pro Gly Gly Gly Arg Gly Asn Pro  
 145 150 155 160

Ala Ser His Ser Gly Asn Thr Gly Ser Leu Gln Arg Glu Asn Ser Phe  
 165 170 175

Ser Ser Leu Asn Thr Ser Asp Ser Asn Ser Ser Ala His Ile Pro Asn  
 180 185 190

Leu Pro Asn Gly Gln Pro Ile Asn Ser Ile His Ile Gln Ser Pro Gln  
 195 200 205

Val Ser Ala Ser Ser Ile Asp Ser Arg Phe Val Val Ser Lys Gln Arg  
 210 215 220

Ile	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Ser	Leu	Ser	Ser	Ser	Gln	Arg	Ser	225	230	235	240
Asn	Ser	Gln	Ser	Gly	Leu	Ser	Phe	Phe	Phe	Ser	Gln	Lys	Ser	Lys	Pro	245	250	255	
Ala	Val	Lys	Arg	Asp	Ser	Thr	Thr	Asp	Leu	Gly	Ala	Phe	Tyr	Asn	Asn	260	265	270	
Ser	Tyr	Gln	Asp	Arg	Asp	Ala	Pro	Ile	Val	Ser	Gly	Ser	Pro	Asn	Ser	275	280	285	
Leu	Ser	Ser	Ala	Glu	Ser	Thr	Val	Ser	Tyr	Gly	Ser	Ser	Ala	Pro	Thr	290	295	300	
Arg	His	Asn	Ser	Met	Ala	Asn	Leu	Lys	Arg	Phe	Phe	Lys	Lys	Ser	Thr	305	310	315	320
Pro	Thr	Thr	Ser	Gln	Pro	Val	Gly	Thr	Ser	Asn	Leu	Ser	Ser	Ser	Leu	325	330	335	
Arg	Ser	Ala	Ser	Ser	Gly	Ala	Ser	Gly	Ala	Met	Asn	Ile	Pro	Asn	Ser	340	345	350	
Leu	Asn	Gly	Gln	Thr	Asn	Asn	Gly	Tyr	Gln	Ser	Pro	Ser	Ser	Phe	Ser	355	360	365	
Ala	Ser	Thr	Ser	Asn	Thr	Ser	Tyr	Ser	Gln	Ser	Pro	Gly	Thr	Asn	Ser	370	375	380	
Ser	Ser	Val	Thr	Arg	Ser	Ser	Thr	Leu	Gln	Asn	Lys	Val	Asn	Tyr	His	385	390	395	400
Glu	Arg	Arg	Gln	Ser	Val	Ser	Gly	Ile	Val	Asn	Asn	Ser	Gln	Gln	Leu	405	410	415	
Pro	Phe	Ser	Lys	Arg	Tyr	His	Ser	Lys	Asn	Ala	Glu	Ser	Leu	Gly	Ala	420	425	430	
Gly	Ala	Gly	Gly	Ser	Val	Arg	Leu	Leu	Thr	Arg	Val	Ser	Asp	Gly	Leu	435	440	445	
Thr	Phe	Ala	Val	Lys	Glu	Phe	Arg	Ala	Lys	Tyr	Gln	Asn	Glu	Ser	Lys	450	455	460	
Arg	Asp	Tyr	Ala	Lys	Lys	Ile	Thr	Gly	Glu	Tyr	Cys	Ile	Gly	Ser	Thr	465	470	475	480
Leu	Lys	His	Pro	Asn	Ile	Ile	Glu	Thr	Val	Glu	Ile	Cys	Tyr	Glu	Asn	485	490	495	
Glu	Arg	Ile	His	Gln	Val	Met	Glu	Tyr	Cys	Asp	Phe	Asp	Leu	Phe	Ala	500	505	510	
Ile	Val	Met	Ser	Asn	Lys	Met	Ser	Arg	Glu	Glu	Ile	Asn	Cys	Cys	Phe	515	520	525	

Lys	Gln	Ile	Leu	Ala	Gly	Val	His	Tyr	Leu	His	Ser	Met	Gly	Leu	Ala	530	535	540
His	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Cys	Val	Ile	Asp	Lys	Arg	Gly	Ile	545	550	555
Val	Lys	Ile	Ile	Asp	Phe	Gly	Ser	Ala	Val	Val	Phe	Ser	Tyr	Pro	Phe	565	570	575
Thr	Lys	Thr	Leu	Ile	Glu	Ala	Gln	Gly	Ile	Val	Gly	Ser	Asp	Pro	Tyr	580	585	590
Leu	Ala	Pro	Glu	Val	Cys	Val	Phe	Asn	Lys	Tyr	Asp	Pro	Arg	Pro	Val	595	600	605
Asp	Val	Trp	Ser	Val	Ala	Ile	Ile	Tyr	Cys	Cys	Met	Met	Leu	Lys	Lys	610	615	620
Phe	Pro	Trp	Lys	Val	Pro	Lys	Leu	Ser	Asp	Ser	Ser	Phe	Lys	Leu	Phe	625	630	635
Ala	Ser	Arg	Gly	Glu	Phe	Ile	Pro	Ile	Ser	Glu	Met	Leu	Lys	Lys	Thr	645	650	655
Pro	Asn	Asp	Met	Glu	Lys	Ser	Asn	Ser	Asn	Gly	Ser	Ser	Gly	Gly	Gly	660	665	670
Leu	Ser	Asn	Leu	Glu	Asp	Ile	Ser	Glu	Ala	Leu	Glu	Asp	Glu	Ile	Thr	675	680	685
Ala	Gly	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Thr	Gly	Gln	Asn	Gly	Ala	Thr	690	695	700
Ala	Asn	Gly	Lys	Asp	His	Thr	Ser	Ser	Glu	Thr	Gly	Ala	Asn	Arg	Leu	705	710	715
Leu	Leu	Ala	Leu	Pro	Glu	Asp	Cys	Arg	Arg	Leu	Ile	Gly	Arg	Met	Val	725	730	735
Glu	Leu	Ala	Pro	Ala	Cys	Arg	Ile	Thr	Ile	Asp	Glu	Val	Leu	Asn	Asp	740	745	750
Ser	Trp	Leu	Lys	Ser	Val	Asn	Met	Cys	Thr	Val	Glu	Glu	Ser	Ser	Pro	755	760	765
Gly	Val	Phe	Glu	Val	Ile	Lys	Cys	Glu	Asp	His	Glu	His	Thr	Gln	Val	770	775	780
Asp	Gln	Ser	Lys	Ala	His	Ile	Ala	Ala	Phe	Glu	Lys	Asn	Lys	Lys	Lys	785	790	795
																		800